

# **Audit**



# **Report**

OFFICE OF THE INSPECTOR GENERAL

**IMPLEMENTATION OF SPECIAL COST ACCOUNTING  
AND REPORTING REQUIREMENTS  
BY DEPOT MAINTENANCE ACTIVITIES**

Report No. 93-170

September 20, 1993

**Department of Defense**

## **Acronyms**

DCAA	Defense Contract Audit Agency
CAGE	Contractor and Government Entity
VAMOS	Visibility and Management of Operating and Support Costs



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
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September 20, 1993

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (PRODUCTION  
AND LOGISTICS)  
COMPTROLLER OF THE DEPARTMENT OF DEFENSE  
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL  
MANAGEMENT)  
ASSISTANT SECRETARY OF THE AIR FORCE  
(FINANCIAL MANAGEMENT AND COMPTROLLER)  
INSPECTOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on the Implementation of Special Cost Accounting and  
Reporting Requirements by Depot Maintenance Activities  
(Report No. 93-170)

We are providing this final report for your information and use. It addresses matters concerning the special cost accounting and reporting requirements for DoD maintenance activities as specified in Chapter 76 of the DoD Accounting Manual 7220.9-M. The Assistant Secretary of Defense (Production and Logistics), Army, Navy, and Air Force comments were considered in preparing this final report. The Comptroller of the Department of Defense comments to the draft of this report were provided too late to be considered in preparing the final report.

Recommendations are subject to resolution in accordance with DoD Directive 7650.3 in the event of nonconcurrence or failure to comment. Therefore, we request that addressees provide final comments on the unresolved recommendations by November 19, 1993. We ask that your comments also indicate concurrence or nonconcurrence with the internal control weaknesses highlighted in Part I. This report identifies no quantifiable monetary benefits.

The courtesies extended to the audit staff are appreciated. If you have any questions on this audit, please contact Mr. Christian Hendricks at (703) 692-3414 (DSN 222-3414) or Mr. Tilghman Schrader at (703) 692-3413 (DSN 222-3413). Copies of the final report will be distributed to the activities listed in Appendix H.

A handwritten signature in cursive script, appearing to read "E. Jones", is positioned above the printed name.

Edward R. Jones  
Deputy Assistant Inspector General  
for Auditing



## Office of the Inspector General, DoD

Report No. 93-170  
Project No. 2LB-0036

September 20, 1993

### IMPLEMENTATION OF SPECIAL COST ACCOUNTING AND REPORTING REQUIREMENTS BY DEPOT MAINTENANCE ACTIVITIES

#### EXECUTIVE SUMMARY

**Introduction.** This audit was initiated at the request of the Director of Maintenance Policy, Office of the Assistant Secretary of Defense (Production and Logistics), to evaluate the preparation of maintenance cost accounting and production reporting data prepared by DoD maintenance activities.

The House of Representatives conference report that accompanied Public Law 99-500 requires that the DoD provide the Senate and House Appropriations Committees an annual report describing the output and unit cost of major weapons systems repaired, overhauled, or modified in the DoD organic and contractor depot maintenance activities. In FY 1990, DoD reported to Congress total depot maintenance costs of \$14.7 billion.

**Objectives.** Our primary audit objective was to determine if DoD organic and contractor-operated weapons systems depot maintenance activities have implemented the special cost accounting and reporting requirements for depot maintenance contained in Chapter 76 of the DoD Accounting Manual. Another objective to determine if the activities implemented effective uniform cost accounting systems was excluded from our audit because the Defense Contract Audit Agency was performing audits of the Military Departments' cost accounting systems. We also evaluated the applicable internal controls.

**Audit Results.** Overall, we determined that the Military Departments were not reporting prompt, complete, and accurate depot maintenance output and cost data to the Office of the Secretary of Defense (OSD). As a result, OSD managers and Congress did not have reliable cost data for evaluating the efficiency and productivity of DoD maintenance depots.

- o The Military Departments did not promptly report to OSD complete and accurate output and unit production costs for the maintenance of weapons systems at DoD organic depots and contractor-operated facilities. As a result, for FY 1990, \$4.512 billion (28.5 percent) of \$15.859 billion reported by the Military Departments to OSD was not identified to major weapons systems or subsystems and the Army and Navy understated the total maintenance cost over 2 years by at least \$486 million (Finding A).

- o The Military Departments were not processing and producing reports on the cost of weapons systems maintenance in the most efficient and effective manner. As a result, OSD and the Military Departments were incurring unnecessary administrative costs and were experiencing delays in reporting, or were not providing, depot maintenance costs to DoD managers (Finding B).

**Internal Controls.** OSD and the Military Departments did not have internal controls to ensure prompt, complete, and accurate reporting of DoD maintenance activities' cost data. Details of controls assessed are provided in Part I of this report.

**Potential Benefits of Audit.** The administrative cost that OSD could save in preparing the Depot Maintenance Production Report could not be quantified. Additional details on potential benefits resulting from audit are included in Appendix F.

**Summary of Recommendations.** We recommended that the Comptroller of the Department of Defense revise DoD Accounting Manual 7220.9-M to provide detailed, uniform data codes for the Military Departments to identify specific weapons and support systems, to require the Assistant Secretaries in the Military Departments responsible for financial management to certify cost reports, and the Under Secretaries of the Military Departments to define report formats. We also recommended that the Assistant Secretary of Defense (Production and Logistics) reduce data processing requirements no longer needed because of the consolidation of data bases and hardcopy cost reports. Further, we recommended that the Under Secretaries of the Military Departments update guidance to implement internal control procedures and establish a more cost-effective depot maintenance report by consolidating the preparation of computer data tapes and cost reports.

**Management Comments.** The Comptroller of the Department of Defense did not provide comments to the draft of this report in time to be included in the final report. The Assistant Secretary of Defense (Production and Logistics) concurred with the intent of the recommendation to reduce or eliminate any data processing requirements no longer necessary. The Army concurred with all recommendations, except recommendations to update data codes quarterly and to reconcile completed work to the general ledger accounts. The Army stated that updating data codes would exacerbate the problem of complete and accurate data codes and that completed work in the depot maintenance production report could not be reconciled to the general ledger accounts. The Army also stated that no corrective actions should be taken until after reporting requirements and the new format are decided by DoD Components and new guidance is published. The Navy made no comments on the recommendations stating that accounting systems and reporting requirements are the responsibility of the Comptroller of the Department of Defense and the Defense Finance and Accounting Service. The Air Force concurred with all the recommendations.

**Audit Response.** We disagree with the Army's comments because updating weapon system and contractor codes should alleviate completeness and accuracy problems by purging data files of unnecessary data codes. Based on the Army's and the Air Force's comments, we revised recommendations to clarify the reconciliation requirement and to extend the date for Military Departments to submit plans of action to the Assistant Secretary of Defense (Production and Logistics) for implementing internal controls. The Navy's comments were unresponsive to the recommendations. Comments to the final report are requested from the Comptroller of the Department of Defense, Assistant Secretary of Defense (Production and Logistics), Army, Navy, and Air Force by November 19, 1993.

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This report was prepared by the Logistics Support Directorate, Office of the Assistant Inspector General for Auditing, DoD. Copies of the report can be obtained from the Secondary Reports Distribution Unit, Audit Planning and Technical Support Directorate at (703) 614-6303 (DSN 224-6303).





## **Part I - Introduction**

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## Background

This audit was performed at the request of the Director of Maintenance Policy, Office of the Assistant Secretary of Defense (Production and Logistics), to evaluate the implementation of special cost accounting procedures for developing and reporting production cost data by activities performing depot-level weapons system maintenance.

In a paragraph entitled, "Industrial Activity Productivity" the conference report of the House and Senate Appropriations Committees to accompany House of Representatives Report 738, "Making Continuing Appropriations for Fiscal Year 1987," stated that beginning with the FY 1988 budget, the DoD should provide data by fiscal year that describes output and the unit cost of major weapons systems repaired, overhauled, or modified by industrially funded effort.

The House and Senate Appropriations Committee conference report to accompany House of Representatives Report 1748, "National Defense Appropriations Act for Fiscal Years 1988 and 1989," provided additional guidance regarding the paragraph, Industrial Activity Productivity, in the 1987 conference report. Specifically, the report stated, "Beginning with its next budget submission, along with the industrial fund overview, the Department [of Defense] is requested to provide data that describes quantities and unit costs of major weapons systems, engines, and equipment maintained in the organic and contract depot maintenance facilities of the Department of Defense. The information should be displayed by weapons system, quantity of items completed, unit labor cost and hours, and material and overhead cost. Workloads accomplished organically and by contract should be separately identified by Service." In November 1991, the Office of the Secretary of Defense (OSD) reported to the House and Senate Appropriations Committees that the total costs associated with the depot maintenance work loads that the Military Departments and their contractors completed during FY 1990 totaled \$14.7 billion.

The Deputy Secretary of Defense memorandum, "Strengthening Depot Maintenance Activities," June 30, 1990, directed the Military Departments to achieve a \$3.9 billion depot maintenance savings by FY 1995. The Military Departments developed long-range strategies to accomplish the Deputy Secretary's objective by improving interservicing, competition, and capacity utilization of the DoD maintenance activities. Although the cost data in the Depot Maintenance Production Report required by chapter 76 of the DoD Accounting Manual is no longer needed to monitor the accomplishment of the Deputy Secretary's objective, the management data provided to OSD and Congress is necessary for making budgetary decisions on weapons systems maintenance and in satisfying the reporting requirements of Congress.

### Objectives

Our primary audit objective was to determine if DoD organic and contractor-operated activities that are accomplishing weapons systems depot maintenance have implemented the special cost accounting and reporting requirements for depot maintenance contained in chapter 76 of the DoD Accounting Manual 7220.9-M, "Special Cost Accounting and Reporting Requirements for Depot Maintenance," March 23, 1990. Other objectives were to determine if the activities have implemented an effective uniform cost accounting system for use in accumulating and evaluating the costs of depot maintenance activities as they relate to the weapons systems supported and items maintained, and to evaluate the applicable internal controls.

### Scope

We evaluated the policies and procedures implemented by the Military Departments to record, accumulate, and report costs to overhaul, modify, and repair weapons systems to determine their compliance with chapter 76 in the DoD Accounting Manual. We used the cost data tables that the Defense Manpower Data Center prepared for the Depot Maintenance Production Reports for FY 1990 and FY 1991 as a basis for our evaluation.

We selected 15 activities involved in the preparation of maintenance data to test the timeliness, completeness, and accuracy of the maintenance production cost data developed and reported by the Military Departments. We also selected one organic depot from each Military Department to evaluate the trend in total maintenance costs reported to OSD from FY 1987 through FY 1990. Additionally, we compared the depots' total maintenance costs reported to OSD in FY 1990 or FY 1991 to each depot's annual financial and operating statement for the same fiscal year.

We determined that the Defense Contract Audit Agency (DCAA) was performing audits of competitions for depot maintenance work loads between DoD Components (public-public competition) and between organic components and the private sector (public-private competition), which is discussed in more detail under "Prior Audits and Other Reviews" and "Other Matters of Interest" in this report. When DCAA completes its scheduled audits of the depot maintenance competitions, a comparative analysis of the audit results should reveal the effectiveness of the Military Departments in implementing uniform cost accounting systems. To avoid potential duplication, we excluded this objective from the scope of our audit.

This performance audit was made from April through November 1992 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD, and accordingly included such tests of internal controls as were considered necessary. Organizations visited or contacted are listed in Appendix G.

## Introduction

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## Internal Controls

**Controls Assessed.** The audit included an evaluation of the adequacy of OSD and Military Departments' internal controls for ensuring the timeliness, completeness, and accuracy of production cost data on weapons system maintenance reported by DoD maintenance activities, as required by chapter 76 of the DoD Accounting Manual.

**Internal Control Weaknesses.** The audit identified material internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. Controls were not effective to ensure prompt, complete, and accurate reporting of maintenance production cost data to OSD. Recommendations A.1.a., A.1.b., and A.2. in this report, if implemented, will correct the weaknesses. The potential monetary benefits to be realized from implementing the recommendations were nonquantifiable. A copy of the final report will be provided to the senior official responsible for internal controls within OSD and the Military Departments.

## Prior Audits and Other Reviews

We did not identify any prior audits in the past 5 years that specifically addressed the implementation of special cost accounting and reporting requirements by DoD maintenance activities. However, the Military Departments' audit agencies and the DCAA were performing multiple audits of competitions for depot maintenance work loads between DoD Components and between organic components and the private sector. Additionally, on November 17, 1992, the General Accounting Office issued a report on maintenance industrial fund activities at Air Force depots. Weaknesses in the Air Force's cost accounting practices were reported.

The Military Departments identified over 60 depot maintenance work loads for a competition demonstration program in DoD from FY 1991 through FY 1995. Military Department audit agencies performed the preaward audits of the contract proposals during the pilot competitions in FY 1991. To ensure independence in determining that proper and consistent costing and accounting procedures were used by prospective bidders for the maintenance work loads, the Comptroller of the Department of Defense designated DCAA as the single agency to perform audits of all public-public and public-private competitions beginning in FY 1992.

As of November 30, 1992, DCAA completed an evaluation of cost accounting systems at 11 Military Department organic depots and published 12 audit reports (Appendix A). The audit reports addressed the adequacy and suitability of the organic depots' accounting systems and practices for accumulating costs under prospective government contracts. The audit reports cited several deficiencies at each of the Military Departments' organic depots such as: inadequate

timekeeping systems, inadequate controls over materials, lack of adequate policies and procedures for cost reports generated by the accounting function for product directorates, inadequate production overhead allocations, inadequate methods for accumulating and allocating general and administrative expenses, lack of disclosure statements, and deficiencies in complying with cost accounting standards.

The DCAA audit reports made recommendations that when implemented will increase the reliability and internal controls of accounting systems at each of the 11 organic depots. DCAA plans to complete an evaluation of 18 cost accounting systems at depots in each Military Department by the end of FY 1993.

The General Accounting Office, Report No. GAO/AFMD-93-5 (OSD Case No. 9218), "Air Force Depot Maintenance - Improved Pricing and Financial Practices Needed," November 17, 1992, concluded that the Air Force's depot maintenance fund had not recovered costs incurred in providing goods and services to customers. As a result, it reported losses totaling \$250 million for FY 1988 through FY 1991. The Air Force's financial systems did not contain reliable data on how much it should and does cost to perform depot maintenance work. Recommendations were suggested to improve Air Force's billing, price setting, and financial management practices.

## Other Matters of Interest

Geopolitical trends in the world, such as the end of the Cold War, provided the impetus for the largest DoD force structure reductions since the end of World War II. Inventories of weapons systems, and the logistics infrastructure needed to support the weapons systems, are decreasing in DoD. Defense Management Report Decisions were made by the Deputy Secretary of Defense during 1990 to both facilitate and effectively manage this downsizing of DoD. The Defense Management Report Decisions have led to the consolidation of DoD industrial funds into the Defense Business Operations Fund; consolidation of accounting and finance offices into the Defense Finance and Accounting Service; and the streamlining of DoD depot maintenance activities. These ongoing, concurrent efforts have impacted the evaluation and ultimate effectiveness of cost accounting systems in DoD.

The Defense Business Operations Fund (the Fund) was established in FY 1992 as a revolving fund that incorporated previous Military Department revolving funds, including depot maintenance industrial funds, into business areas. In July 1990, the Deputy Secretary of Defense approved the establishment of a single finance and accounting organization in DoD, the Defense Finance and Accounting Service (the Financial Service), to strengthen the overall effectiveness of financial management within DoD. The Financial Service became part of the Fund in October 1991.

## Introduction

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On April 30, 1992, the U.S. Assistant Comptroller General gave congressional testimony on the Defense Business Operations Fund Implementation Status. According to the Assistant Comptroller General, the Financial Service initiated two projects in early 1991 to study the various stock and fund accounting systems, including the cost accounting systems for the Military Departments' industrial funds, and made recommendations to improve the systems. Although the Financial Service developed an inventory of systems, it completed no other tasks and work was suspended in late 1991. In February 1992, the Financial Service decided to combine the stock fund and industrial fund initiatives into an ongoing study to select a Defensewide standard general accounting and funds distribution system. As of March 1992, the Financial Service had not yet developed an implementation plan or specified the boundaries of the project. The only milestone the Financial Service had set was a 1993 goal for selecting the standard systems for industrial and stock fund activities. The Assistant Comptroller General concluded that accurate, reliable, and informative cost information is absolutely essential to achieving the Fund's goals; and as of April 30, 1992, the Financial Service had no systematic and reliable way to produce this cost information.

Based primarily on the Assistant Comptroller General's congressional testimony, the National Defense Authorization Act for Fiscal Year 1993 required the Secretary of Defense to implement the Fund in three phases, which included specific actions related to a standard cost accounting system for DoD. The Secretary of Defense was required to prepare a report no later than March 1, 1993, that specified whether DoD selected a standard cost accounting system, and prepared an implementation plan (with milestone dates) for installing the system at the Fund's activities. The Secretary of Defense was also required to conduct a field test of the standard cost accounting system selected for the Fund.

To assist in the streamlining of DoD depot maintenance activities, the Defense Depot Maintenance Council commissioned 25 joint Service studies to provide a common basis for future depot maintenance assessments and analyses; and to develop future strategies for the maintenance of specific commodities in DoD. The Cost Comparability Handbook Study was one of the studies commissioned by the Defense Depot Maintenance Council to develop standardized procedures and techniques for cost comparability during consolidation studies of depots and when competing depot maintenance work loads between DoD Components and between organic components and the private sector.

The Defense Depot Maintenance Council's Cost Comparability Committee updated its Cost Comparability Handbook in January 1992. The Handbook establishes the financial policies regarding bid preparation for work loads subject to public-private and public-public competitions or consolidations at industrially funded depot activities. Included in the Handbook guidance is the requirement that generally accepted accounting principles be followed in compliance with Cost Accounting Standards. Exceptions are made for adjustments for public cost accounting methods specified in the Handbook and

in other pertinent DoD directives. When DCAA began the audits in FY 1992, it used the Cost Comparability Handbook, chapter 76 of the DoD Accounting Manual, and Cost Accounting Standards as its guidance for evaluating the Military Departments' competitions for depot maintenance work loads.

The competitions for the depot maintenance work loads are part of the Military Departments' strategies for achieving a \$3.9 billion savings in depot maintenance budgets during FY 1991 through FY 1995. The Military Departments projected that competition of maintenance work loads between public and private facilities would provide \$1.37 billion of the total \$3.9 billion in savings.

In summary, the selection of a standard cost accounting system for DoD and the DCAA audits of cost accounting systems of DoD maintenance depots will affect the uniformity and accuracy of cost data reported to OSD. As a result, the DoD Accounting Manual guidance for recording, accumulating, and reporting depot maintenance cost data may need to be revised when the Financial Service and DCAA complete these actions.





## **Part II - Findings and Recommendations**

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## **Finding A. Weapons Systems Maintenance Cost**

The Military Departments did not promptly report to OSD complete and accurate output and unit production costs for the maintenance of weapons systems at DoD organic depots and contractor-operated facilities. The condition occurred because OSD had inadequate guidance and internal control procedures. Additionally, the Military Departments did not implement the internal control and reporting procedures specified in the DoD Accounting Manual. As a result, OSD managers and Congress did not have reliable cost data and a uniform basis for monitoring and evaluating the efficiency and productivity of DoD maintenance depots. For FY 1990, \$4.512 billion (28.5 percent) of \$15.859 billion that the Military Departments reported to OSD was not identified to major weapons systems or subsystems and the Army and the Navy understated total maintenance costs over 2 years by at least \$486 million.

### **Background**

Chapter 76 of the DoD Accounting Manual 7220.9-M prescribes the procedures necessary to account for the output and cost of depot-level maintenance and to provide the data to management in the Military Departments, OSD, and Congress for oversight and budgetary decisions. Chapter 76 of the DoD Accounting Manual, issued March 23, 1990, replaced DoD Handbook 7220.29-H, "Department of Defense Depot Maintenance and Maintenance Support Cost Accounting and Production Reporting Handbook," October 1975. The DoD Accounting Manual requires the Military Departments to uniformly record, accumulate, and report the output and cost of performing depot maintenance functions by major weapons system and other military equipment items. The uniform recordation, accumulation, and reporting of cost incurred in depot maintenance operations assists management in the measurement of productivity and efficiency, the development and use of performance measurement and cost standards; and concentrates areas in need of increased management emphasis. The data also are to assist in the identification of total maintenance capability, duplication of capacity, and areas of interservice support of maintenance work load. Specifically, depot maintenance information is to assist the Congress, OSD, and Military Departments' management in the:

- o Comparison of historical unit cost trends with replacement cost trends by monitoring output costs of depots.
- o Oversight in the utilization of depot maintenance resources by monitoring output costs of depots.
- o Evaluation of budgets for depot maintenance work programs.

- o Comparison of cost trends among organic depots or between organic and contract sources.

- o Evaluation of the need for managerial direction and guidance for depot maintenance programs and of maintenance activities' efficient use of resources.

## **Military Departments' Depot Maintenance Production Reports**

**Timeliness.** The Military Departments were not consistently reporting depot maintenance output and unit production costs to OSD within required time frames. The DoD Accounting Manual requires that depot maintenance activities that are funded by an industrial fund provide an annual hardcopy report to OSD, with a computer tape of all operating costs by units of output, both depot maintenance and nondepot maintenance, incurred by the industrial fund. The hardcopy report and computer tape are to be provided to the Assistant Secretary of Defense (Production and Logistics) within 90 days of the end of each fiscal year.

The Defense Manpower Data Center edits and consolidates the computer tapes from the Military Departments and prepares reports and analyses for the Director of Maintenance Policy, Office of the Assistant Secretary of Defense (Production and Logistics). Records maintained by the Defense Manpower Data Center showed that from FY 1986 through FY 1991 the Air Force was the only Military Department that submitted the computer data tapes within the required time frame; and that occurred only in FY 1987.

The Military Departments submitted computer data tapes that exceeded the 90-day limit by 14 to 245 days (Appendix B) and were late by an average of 89 days. For example, the Air Force submitted its computer data tape 39 days after the 90-day limit for FY 1990. The Air Force's computer data tape submission was not only untimely, but was also incomplete and unreadable and the data had to be resubmitted on July 1, 1991, 184 days after the deadline. Further, for FY 1990, the Navy provided eight separate computer data tapes, including the Marine Corps, that were 52 to 186 days late. Without prompt submissions from the Military Departments, OSD could not effectively perform comparisons among the Military Departments, monitor the operations of DoD maintenance depots, evaluate the efficiency of depot operations, or prepare prompt and complete reports for Congress.

**Completeness.** The Military Departments' depot maintenance production reports provided to OSD were incomplete. The DoD Accounting Manual requires that the Military Departments' fiscal year end report to OSD shall provide cost data on closed, completed, and work in process at both organic and contractor activities for weapons systems and major end items. Although the Military Departments report active work in process in their annual financial and operating statements, none of the Military Departments submitted all active

## **Finding A. Weapons Systems Maintenance Cost**

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work in process at both organic and contractor activities to OSD for FY 1991. As a result, OSD could not use the data to make comparisons between DoD organic and contractor maintenance activities.

We compared the total maintenance costs for weapons systems reported for three depots, one depot in each Military Department, for fiscal years FY 1987 through FY 1990 (Appendix C). The total costs had unusually large changes from one year to the next for two of the three depots. For example, at the Norfolk Naval Shipyard, total maintenance costs were \$0.359 billion for FY 1989 and \$1.2 billion for FY 1990. These costs were significantly different than the costs reported in the annual financial and operating statements at the shipyard; \$0.664 billion for FY 1989 and \$0.676 billion for FY 1990.

We compared the annual financial and operating statements of the three depots to the depot maintenance production reports for FY 1990 submitted by those depots. In the depot maintenance production report Corpus Christi Army Depot costs exceeded the Depot's costs in its financial and operating statement by 14.4 percent, Norfolk Naval Shipyard's production report costs exceeded operating statement costs by 76.6 percent and Warner Robins Air Logistics Center's production report costs exceeded operating statement costs by 39.8 percent (Appendix D).

The changes in the total maintenance cost of individual depots from year to year and in the comparisons to the financial and operating statements were caused by several factors. One significant factor was that the Depot Maintenance Production Reports had completed work costs for a fiscal year in the reports that combined the current and previous years and were not separately identified by year. Further analysis of financial statements indicated that work in process was improperly excluded from the Depot Maintenance Production Reports.

Financial officials at the depots and OSD stated that costs for the Military Departments' completed work in the Depot Maintenance Production Report was not sufficient for comparing performance of the depots and contractors. Completed work may span several years, such as ships in overhaul, but reported only when the maintenance of a weapons system is financially complete (the financial records are required to be closed 30 days after completing maintenance). Consequently, cost may be reported in a fiscal year for maintenance work that was performed in previous years, and work performed during a fiscal year but not completed in that same year will not be reported for that year. Because the depots' were not including work in process cost data in the depot maintenance production report, the report did not provide a basis for developing a uniform baseline consisting of all maintenance cost for the year in which the cost was incurred. Without the work in process cost data, the depot maintenance production report is incomplete and cannot be used by Congress, OSD, and the Military Departments for making accurate comparisons between depots and contractors or fiscal years.

**Accuracy.** The costs that the Military Departments reported to OSD for maintenance performed on weapons systems at organic depots and contractors were inaccurate. The DoD Accounting Manual requires that organic maintenance activities establish job orders to control and account for cost of

## Finding A. Weapons Systems Maintenance Cost

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maintenance work done on specified end units such as major weapons systems. Each of the Military Departments used a job order or modified job order cost accounting system to record and accumulate cost data.

The Military Departments had weaknesses in their job order cost accounting procedures for recording and reporting weapons system maintenance costs. Two weaknesses were that data codes for identifying weapons systems and contractor codes for identifying contractors performing maintenance were not sufficiently developed, updated, or used when reporting maintenance costs to OSD. Consequently, the Military Departments had significant total costs that were not identified to weapons systems, unit end items, and contractors for FY 1990 and FY 1991 (Appendix E).

**Weapons System Codes.** The Military Departments were not using appropriate data codes to effectively identify weapons systems and support systems. The Naval Postgraduate School at Monterey, California, completed a 2-year study in August 1986, "Depot Maintenance Cost and Production Accounting and Reporting Study," (the Study) to determine if the reporting system required by DoD Handbook 7220.29-H provided accountability and uniformity of the maintenance and support of weapons systems in DoD. The Study included an examination of the data codes used for identifying depot maintenance costs with a specific weapons system or support system. The Study identified \$5.3 billion (40.2 percent) of \$13.2 billion, reported to OSD in 1983 by the Military Departments, that was not identified to any specific weapons system or support system.

Although the Military Departments improved their reporting of cost data after the 1986 Study, we determined that a significant amount of cost was still unidentified to specific weapons systems or support systems. For FY 1990, \$4.512 billion (28.5 percent of the \$15.859 billion in maintenance cost reported to OSD) was not identified to major end items or weapons systems. The Navy and Air Force accounted for \$4.428 billion of the total of unidentified costs. Although the Air Force reported to OSD that \$3.88 billion was spent on aircraft maintenance completed in FY 1990, \$1.13 billion (29.1 percent) of the maintenance cost could not be identified to specific aircraft.

The 1986 Study concluded that the primary reason for incomplete and inaccurate data was that OSD guidance and formats for coding cost data were imprecise and subject to the Military Departments' interpretation. The DoD Accounting Manual incorporated some recommendations to correct the deficiencies cited by the Study; but the guidance could be further improved.

The DoD Accounting Manual provides a data field for identifying weapons and support systems, but the guidance did not provide the detailed, uniform data codes to identify specific weapons systems or those common in each Military Department. In accordance with DoD guidance, the Military Departments independently developed data tables for coding weapons systems for the depot maintenance production reports. However, the Military Departments did not implement adequate procedures to ensure that the data tables contained sufficient details, were updated regularly, and were used and uniformly defined to identify all weapons systems.

## Finding A. Weapons Systems Maintenance Cost

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For instance, although the depots had the capability to identify weapons and support systems maintenance costs in more detail, they used the miscellaneous codes that identified only the general commodity group (such as, aircraft, ship, or missile) or category (such as a fighter aircraft or radio), and not the specific weapons system (such as a C-130, F-14, or UH-1 aircraft). The miscellaneous coding option is provided for in the DoD Accounting Manual when a maintenance item cannot be identified to a specific weapons or support system.

The 1986 Study showed that the cost reported to repair subsystems and components for use in the Military Departments' supply systems consisted mostly of costs not identified to specific weapons or support systems. Although each of the Military Departments developed data codes for identifying repairable subsystems and components, the specific data codes were not used. The Military Departments were using the miscellaneous coding options that did not identify the subsystem or component to a weapon or support system end item. As a result, when the Military Departments were reporting costs for repair work on major end items, such as F-16 aircraft, they did not necessarily include all the subsystems or components that were repaired for F-16 aircraft. Consequently, the total repair costs for the major end items were inaccurate.

**Contractor Codes.** The Military Departments were not effectively identifying contractors performing weapons system maintenance in their reports to OSD. We determined for FY 1990 that \$1.263 billion (40.9 percent) of \$3.09 billion in maintenance costs were not identified to specific contractors. Appendix E identifies for FY 1990 and FY 1991 unidentified maintenance costs by Military Department.

The Military Departments had inadequate internal controls to ensure that contractor cost data were properly coded for reports to OSD. The DoD Accounting Manual provides a data field in the depot maintenance production report for identifying contractors performing depot maintenance on weapons and support systems. The Military Departments are to enter in this data field the Contractor and Government Entity (CAGE) codes as specified in the DoD Supplement to the Federal Acquisition Regulation and assigned in the Federal Supply Catalog. However, the Military Departments were not assigning CAGE codes or were assigning incomplete or inaccurate CAGE codes.

**Army.** In FY 1990, the Army had only \$14.6 million (4.2 percent) of \$349 million reported, as unidentified to specific contractors. However, in FY 1991, the Army's unidentified costs increased to \$111.2 million (19.8 percent) of \$561.4 million reported for contractors. When we informed Army personnel, during our audit, that contractor costs were unidentified, the Army resubmitted its depot maintenance production report computer tapes to OSD.

In its initial FY 1991 submission, the Army used an invalid CAGE code to report \$107 million in completed contractor maintenance. When we informed the Army that this cost was not identified to a contractor, the Army resubmitted its report using the CAGE code for the U.S. Army Communications and Electronics Command. As a result, the contract cost for the maintenance of communications and electronic equipment was inappropriately identified to this

## Finding A. Weapons Systems Maintenance Cost

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Army activity instead of the performing contractors. We could not identify the specific cost by contractor because the Army had insufficient records to support the contract cost reported and none of the weapons and support systems could be identified. The Army informed us that it used the CAGE code for the incorrect Army activity to elude edit checks at the Defense Manpower Data Center that would identify errors when the Army provided inappropriate data codes. This allowed contractor cost to be reported in the depot maintenance production report without identifying the specific contractors.

**Navy.** The Navy did not identify \$842 million (53.5 percent) of its \$1.57 billion in contractor maintenance costs for FY 1990 to a specific contractor. Of the total unidentified amount, \$745 million was for contract maintenance of ships. At the Navy's data processing center tasked to consolidate contract maintenance costs for ships, CAGE codes had not been included in the center's computer program. As a result, Navy contractor costs for maintenance reported by eight Supervisors of Shipbuilding activities were not identified in the reports to OSD.

**Air Force.** The Air Force did not identify \$406 million (34.8 percent) of its \$1.168 billion in contractor maintenance costs for FY 1990, to a specific contractor. Our analysis of the Air Force's maintenance costs by contractors showed that personnel at the Air Force logistics centers were not entering proper CAGE codes for the contractors. The Defense Manpower Data Center identified 80 invalid CAGE codes for contractors accounting for \$174 million in maintenance costs that the Air Force had submitted in the FY 1991 depot maintenance production report. We determined that the CAGE codes were invalid primarily because they were outdated, incomplete, inaccurate, or missing.

## Reporting Procedures

OSD neither implemented adequate internal controls nor enforced procedures necessary to ensure the promptness, completeness, and accuracy of the cost data reported by the Military Departments. The DoD Accounting Manual requires that each Military Department provide OSD a final fiscal yearend hardcopy report with a narrative analysis of significant developments, information, or trends portrayed in the report. None of the Military Departments provided hardcopy reports or analyses to OSD.

OSD relied on the Defense Manpower Data Center to collect data from computer tapes and compose tables of information for OSD use. On an exception basis, when errors in raw data were detected by the Office of the Assistant Secretary of Defense (Production and Logistics) or the Defense Manpower Data Center, these offices coordinated with the Military Departments in attempting to correct the errors. However, the Defense Manpower Data Center did not routinely provide the Military Departments with a hardcopy report for review and reconciliation of the production and cost data. As a result, the Military Departments did not know how raw cost data from the

## **Finding A. Weapons Systems Maintenance Cost**

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computer tapes were presented or used and did not verify or validate any information in the final reports or data base. The lack of internal control procedures contributed to final reports being late, incomplete, and inaccurate.

For instance, accounting personnel at the Norfolk Naval Shipyard were surprised when we informed them that the total maintenance costs reported to OSD for the Norfolk Naval Shipyard for projects completed in FY 1990 was \$1.2 billion. The Navy personnel provided to us a monthly accounting report internal to the Navy which showed that the total cost of completed customer orders in FY 1990 was \$566 million. Navy accounting personnel believed the \$566 million approximated the actual Norfolk Naval Shipyard costs for maintenance job orders closed during FY 1990. However, they could not verify this because no reconciliation of the cost data had been performed and recorded, and the Norfolk Naval Shipyard did not retain the original computer data tapes used for the depot maintenance production report.

## **Military Department Guidance**

Of the Military Departments, only the Army had issued updated implementing guidance on controls and procedures specified in the DoD Accounting Manual. Chapter 76 of the DoD Accounting Manual revised procedures for special cost accounting and reporting requirements originally addressed in DoD Handbook 7220.29-H. However, the maintenance activities in the Navy and Air Force continued to follow the guidance in DoD Handbook 7220.29-H.

Military Department officials did not emphasize the old or new reporting requirements of the DoD Handbook or Accounting Manual. Military Department officials informed us that required data collection and reporting were of little use to OSD and the Military Departments in managing their maintenance operations. In addition, Military Department officials stated that it would be too costly to satisfy the new reporting requirements of the DoD Accounting Manual. An Army official estimated that it would cost at least \$3 million to develop a computer program to effectively edit the contract maintenance costs being reported by Army. The Air Force estimated that it would cost \$5 million to incorporate the new cost accounting and reporting requirements into the Air Force's Depot Maintenance Management Information System.

We disagree with the Military Department officials that the cost data on the maintenance of weapons systems are of little use and too costly for the Military Departments to provide to OSD, other Government agencies, and Congress. The annual cost reports provide essential data for monitoring performance efficiencies and making significant management and budgetary decisions on depot maintenance activities. The estimated \$8 million needed by two of the Military Departments to provide complete and accurate cost data appears to be worthwhile since the data are used in management decisions affecting billions of dollars in operating costs.



## Finding A. Weapons Systems Maintenance Cost

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We believe another reason the Military Departments did not emphasize the reporting requirements of the DoD Handbook or Accounting Manual is that the production and cost data in the depot maintenance production report is not certified. The DoD Accounting Manual does not require high level officials in the Military Departments to certify to the accuracy and completeness of production and cost data reported to the Assistant Secretary of Defense (Production and Logistics) in a process similar to that required for annual financial reports provided to the Comptroller of the Department of Defense. This lack of involvement by high level Military Department officials contributes to weaknesses in internal controls and perpetuates the reporting of inaccurate and incomplete depot maintenance cost.

**Military Department Compliance.** The Military Departments were not fully complying with the procedures required in the DoD Accounting Manual to ensure prompt, complete, and accurate depot maintenance production cost information.

**Central Data Files.** The DoD Accounting Manual requires that each Military Department maintain, in a central location, a file of the cost data reported to OSD. The Army and Air Force each had a central location for compiling and retaining the depot maintenance cost data. The Navy, however, was not maintaining data files at a central location.

The Comptroller of the Navy was designated as the central activity for consolidating Navy depot maintenance cost data and reporting the cost data to OSD. However, the Comptroller of the Navy did not maintain complete, central data files as required by the DoD Accounting Manual and the computer data tapes provided to OSD originated from nonspecific Navy activities that varied from year to year. Since FY 1986, up to eight different activities, including the Comptroller of the Navy and the Marine Corps, had provided computer data tapes with depot maintenance costs to OSD on an irregular basis.

**Yearend Data Files.** The DoD Accounting Manual requires that the Military Department yearend data files supporting the depot maintenance production reports be retained for 5 years for processing inquiries necessary to plot weapons system maintenance cost trends. None of the Military Departments had complete yearend data files available for 5 years at the maintenance activities.

**Quarterly Data Tapes.** The DoD Accounting Manual requires that copies of computer tapes prepared quarterly by DoD maintenance activities to update data are to be available for review for a minimum of 2 years. The Army and Air Force complied with the requirement. However, none of the Navy maintenance activities had quarterly data tapes available for the required 2 years. The Navy had several consolidation points, such as Jacksonville Naval Aviation Depot for all Naval aviation depots, that summarized cost data for maintenance activities. Because the individual maintenance activities within Navy did not retain quarterly tapes or other data files, cost data submitted to OSD could not be reconciled with records at the individual maintenance activities.

## Finding A. Weapons Systems Maintenance Cost

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**Audit Trails.** The DoD Accounting Manual requires the Military Departments to design their cost and production reporting systems to provide an audit trail from the quarterly data tape back to the job order cost records. The Army had a job order cost accounting system that provided audit trails from data records retained at Army Depot Systems Command to supporting documentation at the individual depots. Our tests of the job orders processed by Army showed that maintenance costs could be traced to the supporting records for costs such as direct labor and materials.

None of the Navy activities had adequate audit trails for cost data recorded on their quarterly computer tapes to the job order level and other supporting documentation. The Navy maintenance activities were not retaining the original annual or quarterly data tapes for preparing the depot maintenance production report. This contributed to the lack of adequate audit trails.

Labor and materials allocated to Air Force job orders could not be traced to supporting cost records. For example, we selected 46 job orders on the maintenance of C-130 aircraft to trace the direct materials to the acquisition cost document. We were unable to determine the source for the cost of any of this material.

**General Ledger Accounts.** The DoD Accounting Manual requires that the total of completed maintenance costs (organic and contractor costs) be reconciled to the amount recorded in the general ledger accounts for cost of goods sold. Army reconciled its maintenance costs for organic depots to the general ledger accounts but did not reconcile contractor costs. The Army major subordinate commands, such as Army Aviation and Troop Command, prepare the contractor cost data computer tapes that are submitted to Army Depot Systems Command for consolidation and forwarding to OSD. The contractor cost data are extracted from procurement records and the report data are not reconciled to the financial records at the Army Commands.

Because the Army is not using official financial and cost accounting records, the contract data reported could be inaccurate. For example, the Army activated a contract in FY 1992 to close procurement actions that had been pending from FY 1991. This contract was closed in FY 1991 and the maintenance costs were reported as completed work for that year. The Army does not have the controls in its procurement process that are in its financial and accounting systems. As a result, the total contract costs of \$64 million that were reported as completed work in FY 1991 could be reported again in FY 1992 when the contract is closed again.

None of the Navy activities had records to document the reconciliation of the reported maintenance cost data to the general ledger accounts. For example, at the Naval Aviation Depot in Jacksonville we evaluated source data files to determine the accuracy of the organic depot maintenance costs that were reported to OSD. The Naval Aviation Depot's costs (\$336.8 million) for direct labor, materials, and other expenses in the source data files exceeded the costs (\$300.9 million) reported to OSD by about \$35.9 million. Navy accounting and finance personnel could not explain these differences and could not reconcile the differences to the general ledger accounts.

## Finding A. Weapons Systems Maintenance Cost

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Navy accounting and finance personnel stated that the depots and shipyards were required to generate numerous cost reports on a daily, weekly, monthly, semiannual, and annual basis to many customers, activities, and Government regulatory offices. Because of these reporting requirements, the Navy simply did not have the time or personnel resources to reconcile all cost reports including the Depot Maintenance Production Report.

The Air Force reconciled its completed work for the organic depots to the general ledger to less than a 2 percent variance; however, the Air Force did not reconcile the reported contractor data to general ledger accounts. For example, at the Warner Robins Air Logistics Center we reviewed the source data files to determine the accuracy of the contractor maintenance costs reported to OSD. We determined that costs (\$234.8 million) for contract maintenance reported to OSD exceeded the costs (\$216.4 million) recorded in the general ledger accounts by about \$18.4 million. The Air Force accounting and finance personnel could not explain the differences and did not have an audit trail to the source files to reconcile the differences to the general ledger accounts.

**Edit Process.** As an integral part of the edit process on the Depot Maintenance Production Report, a review should be performed by maintenance or logistics experts to determine the accuracy, completeness, and reasonableness of the data being submitted. None of the Military Departments had a complete edit process that included reviews by cost accounting and maintenance or logistics personnel. As a result, the Army and Navy understated their FY 1990 and FY 1991 costs by a total of \$486 million. We did not detect any significant Air Force reporting errors to OSD, although the Air Force did not have cost accounting and maintenance personnel involved in the edit review of cost data.

The Army understated its maintenance costs for contractors. We determined that Government-furnished material provided to contractors was not reported to OSD in the Army's second submission for FY 1991. In accordance with the DoD Accounting Manual, this Government-furnished materiel should have been reported as a contractor cost. Army maintenance personnel arbitrarily excluded \$134 million in costs for the Government-furnished materiel. This omission was not detected, in part, because cost accounting personnel were not reviewing depot maintenance production reports.

The Navy's data processing personnel prepared and sent the depot maintenance production cost data to OSD. When we collected the cost data for FY 1990 at Navy consolidation points and compared this data with the data reported to the Defense Manpower Data Center, we determined that the Navy underestimated the total costs for depot maintenance by \$352 million by not having an adequate edit process. Also, the Navy's cost accounting and maintenance personnel were excluded from verifying the cost data prepared by the data processing personnel. Consequently, the Navy's understatement of depot maintenance costs reported to OSD was not detected.

## **Conclusion**

The Military Departments have not effectively implemented the procedures in chapter 76 of the DoD Accounting Manual to ensure that OSD and the Congress have sufficient data to evaluate the outputs and unit cost measures of weapons systems overhauled and repaired by maintenance activities. As a result, neither Congress nor the Assistant Secretary of Defense (Production and Logistics) can effectively monitor the efficiency and effectiveness of the DoD maintenance depots and make sound budgetary decisions. Additionally, the Assistant Secretary of Defense (Production and Logistics) did not have adequate cost data to satisfy the reporting requirements of Congress.

## **Recommendations, Management Comments, and Audit Responses**

**1. We recommend that the Comptroller of the Department of Defense revise DoD Accounting Manual 7220.9-M to:**

**a. Provide detailed, uniform data codes, or other methodology, for the Military Departments to identify specific weapons and support systems and their related costs, and provide for the Military Departments to update the data codes for weapons and support systems and contractors quarterly.**

**b. Require that the Assistant Secretaries responsible for financial management in the Military Departments certify to the completeness and accuracy of the annual depot maintenance production reports provided to the Assistant Secretary of Defense (Production and Logistics).**

**Management Comments.** Comments to our draft report were requested from the Comptroller of the Department of Defense on February 26, 1993. The Comptroller provided comments on August 10, 1993, which was too late to be considered in the final report.

**Audit Response.** We request that the Comptroller of the Department of Defense provide comments on the recommendations in response to the final report.

**2. We recommend that the Under Secretaries of the Military Departments update guidance and implement internal control procedures that will fully comply with revised requirements of chapter 76 of the DoD Accounting Manual 7220.9-M. The Under Secretaries should provide plans of action to the Assistant Secretary of Defense (Production and Logistics) by December 31, 1993, on the implementation of procedures that include requirements to:**

**a. Record, accumulate, and report work in process.**

## Finding A. Weapons Systems Maintenance Cost

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b. Update data codes for weapons and support systems and contractors quarterly.

c. Maintain, in a central location, a file of the cost data reported to OSD.

d. Maintain a yearend data file of the most recent 5 years for processing inquiries. This data file will help plot weapons system maintenance cost trends.

e. Make available, for a minimum of 2 years, copies of quarterly data update tapes for review.

f. Provide an audit trail from the quarterly data tapes back to the job order cost records for cost and production reporting systems.

g. Reconcile completed work and work in process to the amounts recorded in the general ledger accounts.

h. Perform a review by maintenance, logistics and cost accounting experts at appropriate military command levels to determine the accuracy, completeness, and reasonableness of data being submitted.

**Army Comments.** The Acting Director of Supply and Maintenance, Office of the Deputy Chief of Staff for Logistics, concurred with Recommendations A.2.a., A.2.c., A.2.d., A.2.e., A.2.f., and A.2.h., but had reservations about Recommendations A.2.a., A.2.d., A.2.e., and A.2.h. The Acting Director believed that:

- o modifying contracts for contractors to provide work in process cost data by June 30, 1993, was impractical;

- o cost trends for weapons systems cannot be plotted because weapons systems codes were not available and changes were made to the work performance codes and report format;

- o contract data were not reported quarterly by the Defense Contract Administrative Service and Army procurement systems; and

- o the depot maintenance production report was used to compare noncomparable items.

The Acting Director nonconcurred with Recommendation A.2.b., stating that updating data codes quarterly would exacerbate the problem of complete and accurate data codes because there are too many codes for the same item, weapons systems, or contractor in its accounting system. The Acting Director also believed that tracking common use items at the weapons systems code level was meaningless. The Acting Director also nonconcurred with Recommendation A.2.g. stating that all completed work in the depot maintenance production report includes costs from previous years while the general ledger accounts would only have the current year cost data.

## Finding A. Weapons Systems Maintenance Cost

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Consequently, the cost data could not be reconciled over two different time periods. The Acting Director stated in other management comments that no corrective actions should be taken until after reporting requirements and the new format are decided by DoD Components and new guidance is published. He believed that the unavailability of contract data and the need to redesign the depot maintenance production report and its data elements made accomplishing the recommendations impractical. The complete text of the Army's comments is in Part IV.

**Audit Response.** We recognize the Army's reservations with the time constraint on Recommendation A.2.a., and its comments that it would be impractical to fully implement the internal controls, including contractual requirements, before the new DoD reporting requirements and guidance are published. However, we believe the Military Departments should submit a plan of action for implementing the internal controls to the Assistant Secretary of Defense (Production and Logistics) by December 31, 1993. We have revised Recommendation A.2. accordingly. We request that the Army comment on revised Recommendation A.2. in its response to the final report.

Concerning Recommendation A.2.b., we believe that the process of updating weapons systems and contractor codes should include purging data files of unnecessary data codes as well as adding new, uniform data codes at regular intervals. We also believe that identifying common use items to the weapons systems code level is not meaningless because it allows for more accurate disclosure of weapons systems costs. However, we recognize that tracking common use items at the weapons systems code level may not be cost-effective. The Army should have considered using a systematic method, such as weighted average, for allocating the common use items' costs to weapons systems. We have revised Recommendation 1.a. to specify in DoD guidance the methodology that could be used for allocating common use items. We believe this recommendation is still valid. Therefore, we request that the Army reconsider its position in response to the final report.

We agree with the Army's reservations with Recommendations A.2.d. and A.2.h. However, we believe implementing the internal controls in chapter 76 of the DoD Accounting Manual will improve the Military Departments' trend analysis capabilities and cost comparisons by providing complete, accurate data with full disclosure for each weapons system and will provide thorough analyses, exceptions, and explanations in the Military Departments' annual reports. We recognize that the quality of the trend analysis will improve over time as complete and accurate data are provided. We request that the Army reconsider its position and provide comments on Recommendations A.2.d. and A.2.h. in response to the final report.

Concerning the Army's reservations with Recommendation A.2.e., we stated in our report that the Army did not use its financial accounting systems for determining the cost data associated with the maintenance of weapons systems. We believe the financial systems would provide more timely and accurate cost data on the contracted maintenance than the procurement system the Army currently uses. We request that the Army reconsider its position and provide comments on Recommendation A.2.e. in response to the final report.

## Finding A. Weapons Systems Maintenance Cost

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Concerning Recommendation A.2.g., the Army should reconcile completed work and work in process to the amounts recorded in the general ledger accounts for the current year. We revised the recommendation to clarify this position. We request that the Army comment on the revised recommendation in response to the final report.

**Navy Comments.** The Assistant Secretary of the Navy (Research, Development, and Acquisition) made no comments on Recommendations A.2.a. through A.2.h., stating that the Navy was not in a position to address or take corrective action on the recommendations because accounting systems that accumulate the cost data are the responsibility of the Comptroller of the Department of Defense and the Defense Finance and Accounting Service. The complete text of the Navy's comments is in Part IV.

**Audit Response.** The Navy's comments are unresponsive to the recommendations. The Navy is responsible for implementing the guidance and procedures for recording, accumulating, and reporting cost data required by chapter 76 of the DoD Accounting Manual 7220.9-M. An official at the Defense Finance and Accounting Service indicated that no new guidance existed that relieved the Navy of this responsibility. Therefore, we still believe the Navy was responsible for the related conditions cited in the report and is responsible for implementing corrective actions. We request that the Navy provide comments to the recommendations in response to the final report.

**Air Force Comments.** The Principal Deputy Assistant Secretary of the Air Force (Financial Management) concurred with Recommendations A.2.a. through A.2.h., stating that the Air Force must implement the reporting requirements in chapter 76 of the DoD Accounting Manual 7220.9-M. However, the Air Force further stated that it could not address corrective actions or completion dates since the recommendations were addressed to the Comptroller of the Department of Defense. The Air Force also took exception to the accuracy of some statements in the draft report and the validity of the Appendixes. The complete text of the Air Force's comments is in Part IV.

**Audit Response.** Recommendations A.2.a. through A.2.h. were addressed to the Under Secretaries of the Military Departments. We recognize that it would be impractical to fully implement the internal controls specified in the recommendations before new DoD reporting requirements and guidance are published. However, we believe the Military Departments should submit a plan of action for implementing the internal controls to the Assistant Secretary of Defense (Production and Logistics) by December 31, 1993. We have revised Recommendation A.2., accordingly. We request that the Air Force provide comments on revised Recommendation A.2. in response to the final report.

Concerning the Air Force's exceptions to some statements and the appendixes in the draft report, we made appropriate changes in the final report to clarify the data.

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## **Finding B. OSD Maintenance Cost Reporting Requirements**

The Military Departments were not processing and producing reports on the cost of weapons systems maintenance in the most efficient and effective manner. The condition occurred because OSD had not defined the report format or data content required for the depot maintenance production report in DoD Accounting Manual 7220.9-M. Additionally, OSD and the Military Departments had not evaluated the potential for consolidating and revising data management systems for developing and reporting costs on the maintenance of weapons systems for potential and required users. As a result, OSD and the Military Departments were incurring unnecessary administrative costs and were experiencing delays in reporting, or were not providing, depot maintenance costs to DoD managers.

### **Background**

Chapter 76 of the DoD Accounting Manual 7220.9-M prescribes depot maintenance cost accounting requirements for uniformly recording, accumulating, and reporting the cost of performing depot maintenance functions by major weapons system and other military equipment items. Depot maintenance activities funded by an industrial fund are required to report all operating costs to the Office of the Assistant Secretary of Defense (Production and Logistics) annually. Military Departments are required to include in their reports to the Office of the Assistant Secretary, summary cost data on the maintenance of weapons systems and major end items. We evaluated the report formats, data bases, and reporting requirements to OSD and Congress to determine the potential for consolidating the data management systems and reports of the Military Departments and for reducing administrative cost.

### **Report Formats**

**DoD Accounting Manual Reports.** Chapter 76 of the DoD Accounting Manual does not require or define any specific report formats for the annual hardcopy report on maintenance costs to the Assistant Secretary of Defense (Production and Logistics). The Manual requires that each Military Department provide the Assistant Secretary a fiscal yearend hardcopy report with a narrative analysis of significant developments, information, or trends portrayed in the report. Although the Manual provides a data record layout for the computer data tapes, the Manual does not specify or illustrate any particular format for a



## **Finding B. OSD Maintenance Cost Reporting Requirements**

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published hardcopy report or any particular analysis to be performed. Consequently, the Military Departments were not providing the hardcopy report and analyses to the Assistant Secretary's Office.

The Office of the Assistant Secretary also did not coordinate with the Military Departments to determine the most efficient or effective method for compiling, organizing, and presenting raw data that the Military Departments collected for their use as well as OSD's use. As a result, the Office of the Assistant Secretary was unaware of any potential systems in OSD or the Military Departments that could provide the required data more cost-effectively. The Office of the Assistant Secretary relied on the Defense Manpower Data Center to produce reports whenever requested and create tables of weapons systems and contractor costs from the raw data provided on computer tapes from the Military Departments.

**Congressional Reports.** OSD representatives had not coordinated with congressional committees on developing the most effective report on the costs of weapons systems maintenance. OSD did not coordinate with congressional committees on the format and content of required reports. For example, a congressional staffer for the Senate Appropriations Committee informed us that although the annual report was used in making budget decisions on depot maintenance, the report could be modified to provide more useful data. The staffer believed that about two-thirds of the information in the report could be eliminated, such as graphs on weapons systems with insufficient data; information on individual depots could be added, such as annual maintenance cost; and written analyses of trends and comparisons of weapons systems and depots' cost could also be added.

**Reports to the Comptroller of the Department of Defense.** The Comptroller of the Department of Defense is not receiving from the Military Departments cost accounting reports on the cost of weapons systems maintenance. Chapter 76 of the DoD Accounting Manual specifies that cost accounting reports on the maintenance of weapons systems be provided to the Assistant Secretary of Defense (Production and Logistics), but the Manual has no provisions for the Military Departments to report to the Comptroller of the Department of Defense. As a result, the Comptroller does not have hardcopy annual reports on the cost of weapons systems maintenance that are needed to effectively monitor the Defense Business Operations Fund, and develop and implement a standard cost accounting system required by Congress.

**Visibility and Management of Operating and Support Cost Reports.** Other OSD officials have reporting requirements for maintenance cost accounting data that are similar to the requirements of the DoD Accounting Manual for reporting to the Assistant Secretary of Defense (Production and Logistics), but these requirements have not been coordinated and consolidated into a single report for OSD. DoD Directive 7220.33, "Reporting of Operating and Support Costs of Major Defense Systems," May 19, 1984, requires Military Departments to establish and maintain visibility and management of operating and support costs (VAMOSC) systems that permit the development of a well-defined, standard presentation of operating and support costs by weapons system, including a display of critical logistics support costs at the subsystem

## **Finding B. OSD Maintenance Cost Reporting Requirements**

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level for existing (fielded) weapons systems. VAMOSC systems are to provide data to OSD, including the Office of the Assistant Secretary of Defense (Program Analysis and Evaluation), that can be used as a basis for decisions concerning affordability, budget development, support concepts, cost tradeoffs, modifications, and retention of weapons systems. VAMOSC system data are also used to derive operating and support cost estimates for future weapons systems.

DoD Directive 7220.33 requires the Military Departments to use existing cost accounting systems in collecting and allocating functional cost data for the VAMOSC systems. The Directive states that operating and support costs are all costs, including contract support, associated with the operations and maintenance of a weapons system. Depot maintenance overhaul, common and system-peculiar component and equipment repair, and weapons system modifications are included in operating and support costs.

Although DoD Directive 7220.33 requires the Military Departments to establish a VAMOSC system that can generate reports, the Directive has no requirement for an annual or other periodic report on weapons system operating and support costs. The VAMOSC systems established in the Military Departments draw on or have access to the same cost data used for developing the computer tapes for the depot maintenance production reports required by the DoD Accounting Manual. OSD maintains a data base at the Defense Manpower Data Center for DoD Accounting Manual cost accounting reporting requirements; but the Military Departments maintain separate data bases and contractor support to satisfy the indefinite VAMOSC requirements. The Military Departments estimated that it cost about \$2.5 million annually to maintain the data bases and contractor support to satisfy VAMOSC reporting requirements. We believe the VAMOSC systems and data processing specialists in the OSD and the Military Departments could be merged to produce computer tapes and hardcopy reports to satisfy requirements for VAMOSC and the DoD Accounting Manual at reduced costs.

**Army Reports.** The Army prepared computer tapes and hardcopy reports of Army depot maintenance cost for OSD at two separate locations using the same cost accounting data for weapons systems. Army data processing specialists at the Army Depot Systems Command prepared a computer tape for the FY 1991 Depot Maintenance Production Report that was submitted to the Defense Manpower Data Center (the Center). The Center produced data tables for OSD from the computer tape. The Army also had contractor support to maintain a data base and prepare reports for OSD to satisfy FY 1991 VAMOSC requirements. When we showed them the Center's FY 1991 hardcopy data tables for OSD, both the Army data processing specialists at the Army Depot Systems Command and the contractor produced the same data tables in the format used by OSD. Consequently, we believe the data processing capabilities at the Center, the Army Depot Systems Command, and the Army's contractor support for VAMOSC requirements are redundant.

Army officials explained that neither the Army Depot Systems Command nor the Army's contractor support for VAMOSC requirements had produced a hardcopy report for OSD before our audit because OSD had not defined and

## Finding B. OSD Maintenance Cost Reporting Requirements

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coordinated its hardcopy requirements in the past. We believe OSD could develop uniform data elements and report formats that would require only one computer tape or report to satisfy all OSD and congressional requirements for maintenance cost data. Therefore, the OSD and the Army could reduce their administrative costs by consolidating their data processing capabilities and preparing required reports more promptly.

**Navy Reports.** The Navy was using the same cost accounting data to satisfy DoD Accounting Manual reporting requirements and VAMOSC reports. Although the Navy had common data bases for depot maintenance costs, maintenance activities were separately preparing computer tapes on a quarterly basis for its eight shipyards and six aviation depots. Reports were processed through different consolidation points within the Navy although the reports contained some of the same information, such as direct labor, direct material, and other cost accounting data on the maintenance of aircraft and ship overhauls, repairs, and modernization. For example, Jacksonville Naval Aviation Depot consolidated the Navy cost data on aircraft maintenance from its Naval aviation depots for reporting to OSD to satisfy requirements of the DoD Accounting Manual. The same cost data for the Naval aviation depots are consolidated at the Aviation Supply Office through a separate reporting system to satisfy the VAMOSC requirements of DoD Directive 7220.33. The Navy could consolidate the reporting requirement for the DoD Accounting Manual with the Navy VAMOSC requirement at either the Jacksonville Aviation Depot or the Aviation Supply Office to reduce administrative cost.

**Air Force Reports.** The Air Force Materiel Command prepared computer tapes for the Defense Manpower Data Center that could be consolidated with VAMOSC requirements generated by the Air Force Cost Analysis Agency. The Air Force Cost Analysis Agency manages the VAMOSC system as the Air Force's single source of centralized operating and support information. This system collects and consolidates Air Force weapons system and major component data from 20 diverse data systems and generates standard reports. The VAMOSC system requirements are generated from the same data bases used by personnel at Air Force Materiel Command to prepare the computer tapes for the Defense Manpower Data Center. The Air Force Materiel Command prepared separate computer data tapes for the Air Force Cost Analysis Agency and the Defense Manpower Data Center although they have similar requirements. For example, the Air Force Materiel Command further processes the data prepared for the Defense Manpower Data Center by allocating cost to specific weapons systems for use by the Air Force Cost Analysis Agency in generating data for VAMOSC report requirements. The cost data allocated for VAMOSC requirements could also satisfy requirements in the DoD Accounting Manual for allocating costs to weapon systems for reporting to the Defense Manpower Data Center. Therefore, we believe that the Air Force, through consolidation of its weapons systems reporting requirements, could reduce its administrative costs and provide more timely data to OSD.

## **Finding B. OSD Maintenance Cost Reporting Requirements**

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### **Summary**

The administrative cost for generating the depot maintenance production cost report could be reduced. By complying with DoD Accounting Manual guidance, the Military Departments could save administrative cost in unnecessary time and computer resources used to produce, reconcile, and reprocess computer data tapes. As detailed in Finding A., each Military Department had to resubmit computer tapes to the Defense Manpower Data Center because cost data were missing, incomplete, or invalid. Personnel at the Defense Manpower Data Center and in OSD determined that the data were inadequate after the computer tapes were processed into hardcopy tables and reports for OSD. As a result of the errors in data and formatting, the Military Departments had to make data corrections and resubmit the computer tapes.

DoD Accounting Manual and DoD Directive 7220.33 require separate reports from each Military Department. Congress and the Comptroller of the Department of Defense also have needs for reports on the cost of depot maintenance. OSD and the Military Departments could save additional administrative cost by consolidating the separate reporting requirements into a single data tape or hardcopy report format to satisfy all users of depot maintenance cost.

### **Recommendations, Management Comments, and Audit Responses**

#### **1. We recommend that the Comptroller of the Department of Defense:**

a. Establish the most cost-effective format and content for the report on depot maintenance costs by coordinating with appropriate congressional committees, Assistant Secretary of Defense (Production and Logistics), the Assistant Secretary of Defense (Program Analysis and Evaluation), and the Military Departments to determine data requirements that would satisfy oversight needs of Congress and management needs of OSD and the Military Departments.

b. Revise the DoD Accounting Manual 7220.9-M to include a definition and illustration of the format of the Depot Maintenance Production Report.

**Comptroller of the Department of Defense Comments.** Comments to our draft report were requested from the Comptroller of the Department of Defense on February 26, 1993. The Comptroller provided comments too late to be considered in the final report.

## **Finding B. OSD Maintenance Cost Reporting Requirements**

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**Audit Response.** We request that the Comptroller of the Department of Defense provide comments on the recommendations in response to the final report.

**2. We recommend that the Assistant Secretary of Defense (Production and Logistics) in conjunction with the Assistant Secretary of Defense (Program Analysis and Evaluation) reduce or eliminate any data processing requirements no longer needed because of the consolidation of computer and personnel resources for managing data bases and generating hardcopy reports.**

**Assistant Secretary of Defense (Production and Logistics) Comments.** The Principal Deputy Assistant Secretary of Defense (Production and Logistics) partially concurred with Recommendation B.2., stating that elimination of the requirement for the Military Departments to produce hardcopy reports would not reduce or eliminate any data processing requirements. The Principal Deputy further stated that he would work with the Director, Program Analysis and Evaluation to examine the reporting requirements of chapter 76 of the DoD Accounting Manual and DoD Directive 7220.33 with an objective to determine the possibility of combining the requirements. The complete text of the Principal Deputy's comments is in Part IV.

**Audit Response.** The planned actions of the Assistant Secretary of Defense (Production and Logistics) satisfy the intent of the recommendation. We revised the recommendation for clarification by deleting references to the Military Departments and adding the words "consolidation of computer and personnel resources for managing data bases," to show that savings would be achieved primarily by reducing OSD's computer and personnel resources rather than by the production of hardcopy reports by the Military Departments. We request that the Assistant Secretary provide comments on revised Recommendation B.2. in response to the final report. The Assistant Secretary's response should include an estimated completion date.

**3. We recommend that the Under Secretaries of the Military Departments centrally consolidate the preparation of computer data tapes and cost reports of depot maintenance activities, and eliminate personnel and reduce computer resources no longer required to process depot maintenance cost reports when the new reporting requirements are developed and new guidance is published.**

**Army Comments.** The Acting Director of Supply and Maintenance, Office of the Deputy Chief of Staff for Logistics concurred with Recommendation B.3., stating that the Army has a central location for storing and receiving report data. The Acting Director stated in other management comments to our draft report that no corrective actions should be taken until reporting requirements and the new format are decided by DoD Components and new guidance is published. The complete text of the Army's comments is in Part IV.

**Audit Response.** We agree that the Army has a central location for processing the depot maintenance production report. The intent of the recommendation, however, was for the Army to consolidate resources used to process both the

## **Finding B. OSD Maintenance Cost Reporting Requirements**

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depot maintenance production report and VAMOSC reporting requirements after the Comptroller of the Department of Defense determines new reporting and data requirements and publishes new guidance. We have revised the recommendation, accordingly. We request that the Army provide comments to the revised recommendation in its response to the final report.

**Navy Comments.** The Assistant Secretary of the Navy (Research, Development, and Acquisition) made no comments on Recommendation B.3., stating that it was not in a position to address or take corrective action on the recommendation because actions to consolidate the preparation of computer data tapes and cost reports are the responsibility of the Comptroller of the Department of Defense and the Defense Finance and Accounting Service. The complete text of the Navy's comments is in Part IV.

**Audit Response.** The Navy's comments are unresponsive to the recommendation. The Navy controls the assets and resources that will be responsible for implementing corrective actions. Therefore, we request that the Navy provide comments to the recommendations in its response to the final report.

**Air Force Comments.** The Principal Deputy Assistant Secretary of the Air Force (Financial Management) concurred with Recommendation B.3., stating that the Air Force reporting systems were outdated. However, the Air Force did not describe any corrective actions or completion dates, stating that the recommendations were addressed to the Comptroller of the Department of Defense. The complete text of the Air Force's comments is in Part IV.

**Audit Response.** Recommendation B.3. was addressed to the Under Secretaries of the Military Departments. We recognize that it would be impractical to fully implement the processes specified in the recommendation before new DoD reporting requirements and new guidance are published. We have revised Recommendation B.3., accordingly. We request that the Air Force provide comments on revised Recommendation B.3. in its response to the final report.

## **Part III - Additional Information**

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## **Appendix A. Defense Contract Audit Agency Audits of DoD Organic Depots' Cost Accounting Systems**

### **Army**

Audit Report No. 1201-92C17700070, "Report on Preaward Accounting System Survey, Anniston Army Depot, Anniston, Alabama," October 8, 1992.

Audit Report No. 3501-92J17740011, "Report on Preaward Accounting System Survey, Corpus Christi Army Depot, Corpus Christi, Texas," September 23, 1992.

Audit Report No. 6291-92F17900007-343, "Audit Report on Estimating System Survey and Cost Accounting Practices, Tobyhanna Army Depot, Tobyhanna, Pennsylvania," July 31, 1992.

Audit Report No. 3231-92G17740009, "Report on Preaward Accounting System Survey, Tooele Army Depot, Tooele, Utah," August 24, 1992.

### **Navy**

Audit Report No. 1251-92J7740112-2-417, "Report on Accounting System Survey, Naval Aviation Depot, Jacksonville, Florida," November 13, 1992.

### **Air Force**

Audit Report No. 3411-92I17740001, "Report on Preaward Accounting System Survey, Ogden Air Logistics Center, Hill Air Force Base, Utah," October 13, 1992.

Audit Report No. 3591-92M17700230, "Report on Preaward Accounting System Survey, Oklahoma City Air Logistics Center (AFLC), Tinker Air Force Base, Oklahoma," September 17, 1992.

Audit Report No. 4321-92C17740050, "Report on Preaward Accounting System Survey, Sacramento Air Logistics Center (SMALC), McClellan Air Force Base, California," September 28, 1992.



## **Appendix A. Defense Contract Audit Agency Audits**

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Audit Report No. 3501-92J17740009, "Report on Preaward Accounting System Survey, San

Antonio Air Logistics Center, Kelly Air Force Base, Texas," August 14, 1992.

Audit Report No. 1101-92G17740024-2-431, "Report on Preaward Accounting System Survey, Warner Robins Air Logistics Center (AFLC), Robins Air Force Base, Georgia," June 20, 1992.

Audit Report No. 1101-93G17740001-2-073, "Report on Follow-up Accounting System Survey, Warner Robins Air Logistics Center (AFLC), C-141 Product Directorate (LJ), Robins Air Force Base, Georgia," November 13, 1992.

### **Marine Corps**

Audit Report No. 1101-92G17740028-2-683, "Report on Preaward Accounting System Survey, Depot Maintenance Activity (DMA), Marine Corps Logistic Base (MCLB), Albany, Georgia," September 28, 1992.

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## Appendix B. Timeliness of Depot Maintenance Production Reports

Chapter 76 of the DoD Accounting Manual requires that DoD Components report weapons systems maintenance cost via computer tapes to OSD within 90 days following the end of the fiscal year. The data below show the number of days the computer tapes for the depot maintenance production reports were submitted to OSD after the 90-day requirement.

<u>DoD Component</u>	<u>DAYS LATE</u>					
	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Air Force	14	0	83	185	184	29
Army	18	29	215	24	39	199
Marine Corps	60	50	32	61	115	134
Navy:						
Navy Comptroller	60	*	32	108	124	*
Naval Air Systems Command	*	97	110	*	122	129
Naval Sea Systems Command	239	85	*	*	125	129
Aviation Supply Office	*	*	245	83	52	52
Ships Parts Control Center	*	*	97	61	159	130
Ships Repair Facilities	*	85	*	*	128	150
Supervisor of Shipbuilding and Repair	*	*	*	*	186	*

\* No submission for that fiscal year.

Note: The days above also represent resubmissions of data by the DoD Components.

## Appendix C. Comparisons of Reported Annual Depot Maintenance Cost

Depot	Total Depot Maintenance Production Costs								
	FY	FY	Percent	FY	FY	Percent	FY	FY	Percent
	<u>1987</u>	<u>1988</u>	<u>Change</u>	<u>1988</u>	<u>1989</u>	<u>Change</u>	<u>1989</u>	<u>1990</u>	<u>Change</u>
	(Millions)			(Millions)			(Millions)		
<u>Corpus Christi</u>									
<u>Army Depot:</u>									
Direct Labor	\$ 59.65	\$ 68.00	+ 14.0	\$ 68.00	\$ 38.78	- 43.0	\$ 38.78	\$ 89.71	+131.3
Direct Material	138.68	173.46	+ 25.1	173.46	96.74	- 44.2	96.74	341.53	+253.0
Overhead	78.44	91.44	+ 16.6	91.44	53.23	- 41.8	53.23	117.68	+121.1
General and									
Administrative	3.93	4.88	+ 24.2	4.88	2.73	- 44.1	2.73	6.51	+138.5
Other	<u>0.79</u>	<u>1.93</u>	+144.3	<u>1.93</u>	<u>0.73</u>	- 62.2	<u>0.73</u>	<u>3.84</u>	+426.0
Total	<u>\$ 281.49</u>	<u>\$ 339.71</u>		<u>\$ 339.71</u>	<u>\$ 192.21</u>		<u>\$ 192.21</u>	<u>\$ 559.27</u>	
<u>Norfolk Naval</u>									
<u>Shipyard:</u>									
Direct Labor	\$ 159.35	\$ 235.80	+ 48.0	\$ 235.80	\$ 77.04	- 67.3	\$ 77.04	\$ 227.15	+194.8
Direct Material	107.93	131.19	+ 21.6	131.19	42.83	- 67.4	42.83	108.34	+153.0
Overhead	524.48	687.85	+ 31.1	687.85	197.12	- 71.3	197.12	639.22	+224.3
General and									
Administrative	78.20	112.24	+ 43.5	112.24	34.86	- 68.9	34.86	139.39	+299.9
Support Costs	0.00	0.00		0.00	0.00		0.00	49.73	
Other	<u>13.58</u>	<u>33.10</u>	+143.7	<u>33.10</u>	<u>7.00</u>	- 78.9	<u>7.00</u>	<u>30.59</u>	+337.0
Total	<u>\$ 883.54</u>	<u>\$1200.18</u>		<u>\$1200.18</u>	<u>\$ 358.85</u>		<u>\$ 358.85</u>	<u>\$1194.42</u>	
<u>Warner Robins</u>									
<u>Air Logistics Center:</u>									
Direct Labor	\$ 129.66	\$ 111.35	- 14.1	\$ 111.35	\$ 126.35	+ 13.5	\$ 126.35	\$ 131.53	+ 4.1
Direct Material	200.06	158.63	- 20.7	158.63	201.11	+ 26.8	201.11	236.07	+ 17.4
Overhead	111.79	100.42	- 10.2	100.42	110.78	+ 10.3	110.78	114.88	+ 3.7
General and									
Administrative	75.09	73.03	- 2.7	73.03	82.04	+ 12.3	82.04	92.52	+ 12.8
Other	<u>5.60</u>	<u>2.93</u>	- 47.7	<u>2.93</u>	<u>3.50</u>	+ 19.5	<u>3.50</u>	<u>1.82</u>	- 48.0
Total	<u>\$ 522.20</u>	<u>\$ 446.36</u>		<u>\$ 446.36</u>	<u>\$ 523.78</u>		<u>\$ 523.78</u>	<u>\$ 576.82</u>	

## Appendix D. Comparisons of Depot Maintenance Production Report to Annual Financial Statements

<u>Depot</u>	<u>Depot Maintenance Production Report<sup>1</sup> (Millions)</u>	<u>Financial and Operating Statement<sup>2</sup> (Millions)</u>	<u>Difference (Millions)</u>	<u>Percent</u>
<u>Corpus Christi Army Depot, FY 1991:</u>				
Direct Labor	\$ 77.774	\$ 92.868	\$ (15.094)	- 16.3
Direct Material	231.261	150.862	80.399	+ 53.3
Overhead	97.100	109.767	(12.667)	- 11.5
General and Administrative	5.380	3.031	2.349	+ 77.5
Other	6.016	1.902	4.114	+216.3
Contract Services	0.000	5.246	(5.246)	-100.0
Military Costs	0.033	1.290	(1.257)	- 97.4
<b>Total</b>	<b><u>\$417.564</u></b>	<b><u>\$364.966</u></b>	<b><u>\$ 52.598</u></b>	
<u>Norfolk Naval Shipyard, FY 1990<sup>3</sup>:</u>				
Direct Labor	\$ 227.151	\$216.134	\$ 11.017	+ 5.1
Direct Material	108.343	119.004	(10.661)	- 9.0
Overhead	639.223	183.143	456.080	+249.0
General and Administrative	139.394	153.730	(14.336)	- 9.3
Other	30.588	4.168	26.420	+633.9
Support Costs	49.727	0.000	49.727	+100.0
<b>Total</b>	<b><u>\$1,194.426</u></b>	<b><u>\$676.179</u></b>	<b><u>\$518.247</u></b>	
<u>Warner Robins Air Logistics Center, FY 1991:</u>				
Direct Labor	\$148.672	\$145.440	\$ 3.232	+ 2.2
Direct Material	221.411	101.681	119.730	+117.7
Overhead	143.430	123.868	19.562	+ 15.8
General and Administrative	94.607	64.534	30.073	+ 46.6
Other	2.362	1.030	1.332	+129.3
<b>Total</b>	<b><u>\$610.482</u></b>	<b><u>\$436.553</u></b>	<b><u>\$173.929</u></b>	

<sup>1</sup> Includes funded and unfunded depot maintenance costs; excludes work in process.

<sup>2</sup> Includes funded depot maintenance costs; excludes work in process.

<sup>3</sup> The Navy submitted Depot Maintenance Production Report for FY 1991 too late to be included in audit data.

## Appendix E. Total Maintenance Cost for Weapons Systems and Contractors

<u>Military Department</u>	<u>Unit Production Maintenance Cost for Weapon Systems</u> (Millions)	<u>Unidentified Total Cost</u> (Millions)	<u>Percent of Total Cost Unidentified</u>
<u>Army</u>			
FY 1990	\$2,146.0	\$ 84.0	3.91
FY 1991	\$2,216.6	\$ 208.8	9.42
<u>Navy</u>			
FY 1990	\$8,873.4	\$2,729.8	30.76
FY 1991	*	*	*
<u>Air Force</u>			
FY 1990	\$4,727.0	\$1,698.7	35.94
FY 1991	\$4,515.6	\$1,704.5	37.75

<u>Military Department</u>	<u>Unit Production Maintenance Cost for Contractors</u> (Millions)	<u>Unidentified Total Cost</u> (Millions)	<u>Percent of Total Cost Unidentified</u>
<u>Army</u>			
FY 1990	\$ 349.0	\$ 14.6	4.18
FY 1991	\$ 561.4	\$ 111.2	19.81
<u>Navy</u>			
FY 1990	\$1,573.0	\$ 842.1	53.53
FY 1991	*	*	*
<u>Air Force</u>			
FY 1990	\$1,168.0	\$ 405.9	34.75
FY 1991	\$1,132.6	\$ 424.0	37.44

\* The Navy submitted Depot Maintenance Production Report for FY 1991 too late to be included in audit data.

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## Appendix F. Summary of Potential Benefits Resulting from Audit

Recommendation Reference	Description of Benefit	Type of Benefit
A.1.a.	Internal Control. OSD will revise DoD Accounting Manual to provide detailed, uniform data codes for identifying weapons systems maintenance costs.	Nonmonetary.
A.1.b.	Internal Control. Military Departments will be required to certify to the completeness and accuracy of the Depot Maintenance Production Reports provided to OSD.	Nonmonetary.
A.2.	Internal Control. Military Departments will update guidance to implement internal controls to comply with OSD guidance for preparing cost accounting reports.	Nonmonetary.
B.1.	Internal Control. OSD will revise DoD Accounting Manual to define depot maintenance production cost report format.	Nonmonetary.
B.2.	Economy and Efficiency. OSD will reduce administrative costs by eliminating unnecessary data processing resources.	Monetary benefits cannot be quantified.
B.3.	Economy and Efficiency. Military Departments will reduce administrative costs by consolidating cost reports and eliminating unnecessary data processing resources.	Monetary benefits cannot be quantified.

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## **Appendix G. Organizations Visited or Contacted**

### **Office of the Secretary of Defense**

Office of the Comptroller of the Department of Defense, Washington, DC  
Defense Manpower Data Center, Office of the Assistant Secretary of Defense (Force Management and Personnel), Arlington, VA  
Director, Maintenance Policy, Office of the Assistant Secretary of Defense (Production and Logistics), Washington, DC  
Office of the Assistant Secretary of Defense (Programs Analysis and Evaluation), Washington, DC  
Defense Finance and Accounting Service, Arlington, VA

### **Department of the Army**

Office of the Assistant Secretary of the Army (Financial Management), Washington, DC  
Office of the Deputy Chief of Staff for Logistics, Washington, DC  
Army Materiel Command, Alexandria, VA  
Army Aviation and Troop Command, Saint Louis, MO  
Army Communications and Electronics Command, Fort Monmouth, NJ  
Army Depot Systems Command, Chambersburg, PA  
Corpus Christi Army Depot, Corpus Christi, TX  
Letterkenney Army Depot, Chambersburg, PA  
Red River Army Depot, Texarkana, TX  
Army Cost and Economic Analysis Center, Washington, DC

### **Department of the Navy**

Office of the Assistant Secretary of the Navy (Financial Management), Washington, DC  
Office of the Deputy Chief of Naval Operations (Logistics), Washington, DC  
Naval Air Systems Command, Arlington, VA  
Naval Sea Systems Command, Arlington, VA  
Naval Aviation Depot Operations Center, Patuxent River, MD  
Naval Aviation Depot, Jacksonville, FL  
Naval Aviation Depot, Norfolk, VA  
Charleston Naval Shipyard, Charleston, SC  
Norfolk Naval Shipyard, Portsmouth, VA  
Naval Ordnance Activity, Indian Head, MD  
Naval Weapons Station, Charleston, SC  
Supervisor of Ships Activity, Charleston, SC  
Supervisor of Ships Activity, Portsmouth, VA  
Aviation Supply Office, Philadelphia, PA  
Ships Parts Control Center, Mechanicsburg, PA  
Naval Cost Analysis Center, Washington, DC

## **Appendix G. Organizations Visited or Contacted**

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### **Department of the Air Force**

Office of the Assistant Secretary of the Air Force (Financial Management and Comptroller),  
Washington, DC  
Office of the Deputy Chief of Staff (Logistics), Washington, DC  
Air Force Materiel Command, Wright-Patterson Air Force Base, OH  
Ogden Air Logistics Center, Ogden, UT  
Warner Robins Air Logistics Center, Robins Air Force Base, GA  
Air Force Cost Analysis Agency, Washington, DC

### **Non-Defense Organizations**

Senate Appropriations Committee Staff, Washington, DC  
Senate Armed Services Committee Staff, Washington, DC  
House Appropriations Committee Staff, Washington, DC  
House Armed Services Committee Staff, Washington, DC



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## **Appendix H. Report Distribution**

### **Office of the Secretary of Defense**

Assistant Secretary of Defense (Production and Logistics)  
Assistant Secretary of Defense (Program Analysis and Evaluation)  
Assistant to the Secretary of Defense for Public Affairs  
Comptroller of the Department of Defense

### **Department of the Army**

Secretary of the Army  
Inspector General

### **Department of the Navy**

Secretary of the Navy  
Assistant Secretary of the Navy (Financial Management)  
Auditor General, Naval Audit Service

### **Department of the Air Force**

Secretary of the Air Force  
Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Air Force Audit Agency

### **Defense Agencies**

Director, Defense Contract Audit Agency  
Director, Defense Logistics Agency  
Director, Defense Logistics Studies Information Exchange  
Inspector General, Defense Intelligence Agency  
Inspector General, National Security Agency

## Appendix H. Report Distribution

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### Non-Defense Federal Organizations

Office of Management and Budget

U.S. General Accounting Office

National Security and International Affairs Division, Technical Information Center

National Security and International Affairs Division, Defense and National

Aeronautics and Space Administration Management Issues

National Security and International Affairs Division, Military Operations and

Capabilities Issues

Chairman and Ranking Minority Member of each of the following Congressional Committees and Subcommittees:

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Operations

House Subcommittee on Legislation and National Security, Committee on Government Operations

## **Part IV - Management Comments**

# Assistant Secretary of Defense (Production and Logistics) Comments



ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON, DC 20301-8000

JUN 02 1993

(L/MD)

MEMORANDUM FOR DIRECTOR, LOGISTICS SUPPORT DIRECTORATE,  
OFFICE OF THE DOD INSPECTOR GENERAL

SUBJECT: Report on the Audit of the Implementation of Special Cost Accounting and Reporting Requirements by Depot Maintenance Activities (Project No. 2LB-0036)

Your memorandum of February 25, 1993, forwarded the subject draft report for review and comment. I would like to take this opportunity to thank you for performing this audit. The draft report validates the need for prompt, complete, and accurate maintenance cost accounting data, something that has long been advocated by this office. The true value of the improvements due to this audit will not be the reduction in administrative costs, but rather the increased ability of the DoD to effectively manage depot maintenance.

The draft report contained the following recommendation addressed to the Assistant Secretary of Defense (Production and Logistics):

- We recommend that the Assistant Secretary of Defense (Production and Logistics), in conjunction with the Assistant Secretary of Defense (Program Analysis and Evaluation) reduce or eliminate any data processing requirements no longer needed because of the Military Departments' use of internal resources for generating hard copy reports.

We partially concur with this recommendation. Currently, there is only one hard copy report required under Chapter 76 of the DoD Accounting Manual. Along with the data tape submission, the Services are to provide summary data for at least major end items. The summary data is to be accompanied by a narrative analysis of significant developments, information, or trends portrayed in the report. The intent of that hard copy report was to ensure that the cost data being provided by the Services was actually being reviewed prior to submission to OSD (P&L). The content requirement was

purposefully left vague to allow the Services to highlight significant trends or events in the depot maintenance arena that had occurred during the previous year, i.e., industrial funding of depot level reparables, increased contracting, or changes in accounting procedures. This hardcopy report is an opportunity for the Services to justify anomalies in the data that might affect subsequent analysis by OSD. Elimination of this requirement would not reduce, or eliminate, any data processing requirements.

The Services are required to submit maintenance cost data for the preceding year. That data is then entered into a DoD-wide data base maintained by the Defense Manpower Data Center. The data base is utilized, not only for Service by Service analysis, but for cross Service analysis. That type of analysis is used for a variety of internal and external studies and reports. Cross service data manipulation would be impossible to perform without the level of detail currently received from the Services. The individual Services are not in a position to perform cross service analysis.

We will work with the Director, Program Analysis and Evaluation to examine the similarities and differences between the data required under Chapter 76 of the DoD Accounting Manual, DoD 7220.9-M and the data required under the Visibility and Management of Operating and Support Cost Reports, DoD Directive 7220.33. The objective of this examination will be to determine the possibility of combining the reporting requirements.

My point of contact for this matter is Mr. Jay Berry. His phone number is (703) 614-0798.

*David J. Berteau*

David J. Berteau  
Principal Deputy Assistant Secretary  
of Defense (Production and Logistics)

# Department of the Army Comments



DEPARTMENT OF THE ARMY  
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS  
WASHINGTON, DC 20310-0500



DALO-SMM

28 APR 1993

MEMORANDUM THRU

~~DEPUTY CHIEF OF STAFF FOR LOGISTICS~~

*ECAM*  
*29 Apr 93*

~~DIRECTOR OF THE ARMY STAFF~~

*29 Apr 93*  
*JOHANN L RAMPEZ LTC. GS. ADAS*

~~ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS AND ENVIRONMENT)~~

*A. Camo*  
*A Camo*  
*Assistant Deputy*  
*OASA (1)*

ASSISTANT SECRETARY OF THE ARMY (FINANCIAL MANAGEMENT)

FOR THE INSPECTOR GENERAL, DEPARTMENT OF DEFENSE (AUDITING)

SUBJECT: Report of the Audit of the Implementation of Special Cost Accounting and Reporting Requirements by Depot Maintenance Activities (Project No. 2LB-0036)--INFORMATION MEMORANDUM

1. HQDA memorandum of 2 Mar 93, (Tab A) asked ODCSLOG to respond to the subject report (Encl to Tab A).

2. The extracted recommendations with the Army position given after each one, are listed at Tab B. It is believed that the Army should take no corrective actions until after the reporting requirements and format are reviewed by DoD and new guidance published. It would be pointless to change Army systems before receiving guidance on what is desired.

2 Encls

A. DAVID MILLS  
Acting Director of Supply  
and Maintenance

CF:  
VCSA

SAIL - Concur, Mr.Orsini/79030 (conference)

Mr. Maxfield/54151

EXTRACT OF RECOMMENDATIONS

**Finding A. Weapons Systems Maintenance Cost**

**Recommendations for Corrective Action**

1. We recommend that the Comptroller of the Department of Defense Revise DoD Accounting Manual 7220.9-M to:

a. Provide detailed, uniform data codes for the military Departments to identify specific weapons and support systems, and update the data codes for weapons and support systems and contractors quarterly.

ARMY POSITION: Concur with reservations. Standard data elements are needed however there are problems with using them. The Army has standard Weapon Systems Codes for the organic depots, but many reparable are used on more than one end item. It would be impossible to show what end item code applies when making the repairs to the assembly. In contracting there is nothing that requires the inclusion of end item codes in contracts, therefore they are not included and cannot be recovered from automated data.

b. Require that the Under Secretaries of the Military Departments certify to the completeness and accuracy of the annual depot maintenance production report provided to the Assistant Secretary of Defense (Production and Logistics).

ARMY POSITION: Concur with reservation. This would be extremely difficult to accomplish in practice. Either the Under Secretary would be certifying a tape of 17 to 18 thousand records or a printout of similar magnitude. In either case the data for contracts is not now available in the automated system as it was not considered a necessary item when the contract was let. This should be deferred until DoD redesigns the report and its data elements.

2. We recommend that the Under Secretaries of the Military Departments update guidance and implement internal control procedures that will fully comply with requirements of chapter 76 of the DoD Accounting Manual 7220.9-M. The Under Secretaries should provide plans of action to the Comptroller of the Department of Defense by June 30, 1993, on the implementation of procedures that include requirements to:

a. Record, accumulate, and report work in process.

ARMY POSITION: Concur with reservations. The Army now has and reports the organically performed work in process. The contract work in process information is not available and would have to have contracts modified to require it at an extra cost. ✓ The requirement to accomplish this by 30 June 1993 is not reasonable. It must wait on the new guidance from DoD.

b. Update data codes for weapons and support systems and contractors quarterly.

ARMY POSITION: Non-concur. The problem that now resides in the system is that there are too many codes for the same item, weapon system or contractor. Quarterly updates would simply exacerbate the situation unless all systems were changed to allow for the retroactive, automated, updating. It is meaningless to try and track common use items at the weapon systems code level.

c. Maintain, in a central location, a file of the cost data reported to OSD.

ARMY POSITION: Concur. The Army now does this.

d. Maintain a year end data file of the most recent five years for processing inquiries. This data file will help plot weapons system maintenance cost trends.

ARMY POSITION: Concur with reservation. The Army has a central location for storing the data. However; since weapons systems codes were not available in all cases the maintenance cost trends can not be plotted. The work performance code may have changed from repair to repair and modify. In addition the format of the report has been changed in the past five years which means that the base line is not the same over the period.

e. Make available, for a minimum of two years, copies of quarterly data update tapes for review.

ARMY POSITION: Concur with reservation. The organic portion of the report could be done if the expense warrants. The Army has no way of meeting the quarterly reporting requirements for contractual data in a meaningful way. We must rely upon Defense Contract Administrative Service and Commodity Command Standard System procurement closure applications, some of which are run only on an annual basis.

f. Provide an audit trail from the quarterly data tapes back to the job order cost records for cost and production reporting systems.

ARMY POSITION: Concur. The Army now uses field 44, an unused field in the report, to show the command, year and Pron number, which makes it possible to back track contractual information. The only flaw is that it can not be done on a quarterly basis (see e above).

g. Reconcile all completed work and work in process to the amounts recorded in the general ledger accounts.



ARMY POSITION: Non-concur as stated. All completed work, as the report is now formatted, includes costs from previous years. The general ledger accounts would have only the current year.

h. Perform a review by maintenance, logistics and cost accounting experts at appropriate military command levels to determine the accuracy, completeness and reasonableness of data being submitted.

ARMY POSITION: Concur with reservations. The report is too often used to compare non comparable items. Suggest that as a portion of the DoD review of the report discussed in finding B below that a work group of knowledgeable action officers from the services be included. First the DoD should meet with congressional committee staffers to determine what needs to be included in the report.

**Finding B. OSD Maintenance Cost Reporting Requirements**

**Recommendations for Corrective Action**

1. We recommend that the Comptroller of the Department of Defense:

a. Establish the most cost-effective format and content for the report on depot maintenance cost by coordinating with appropriate congressional committees, the Assistant Secretary of Defense (Production and Logistics), the Assistant Secretary of Defense (Program Analysis and Evaluation), and the Military Departments to determine data requirements that would satisfy management need in Congress, OSD, and the Military Departments.

ARMY POSITION: Concur. In addition to the agencies mentioned, coordination should also be made with the Joint Logistics Services Committee and the DoD Corporate Information Management (CIM). As an example, the data should be consistent with that of the Maintenance Planning and Execution (MP&E) system. Care must be used in developing the MP&E to insure that it does not supplant that portion of Maintenance Management and Data System (MDMS) which now feeds the 1397 report.

b. Revise the DoD Accounting Manual 7220.9-M to include a definition and illustration of the format of the Depot Maintenance Production Report.

ARMY POSITION: Concur. Recommend that the same codes now used by the organic maintenance activities be used. In addition the "hard copy" of the report should be spelled out if it includes summaries that need to be certified for accuracy.

2. We recommend that the Assistant Secretary of Defense (Production and Logistics) in conjunction with the Assistant

Secretary of Defense (Program Analysis and Evaluation) reduce or eliminate any data processing requirement no longer needed because of the Military Departments' use of internal resources for generating hard copy reports.

ARMY POSITION: Concur. Recommend that the Army be allowed to provide their own hard copy reports rather than providing tapes which are then processed by someone else. The Army has had problems explaining errors in the reporting tapes which were in fact errors in processing of them.

3. We recommend that the Under Secretaries of the Military Departments centrally consolidate the preparation of computer data tapes and cost report of depot maintenance activities, and eliminate personnel and reduce computer resources no longer required to process depot maintenance cost reports.

ARMY POSITION: Concur. The Army has a central location for storing and receiving the report data. It is currently located at HQ DESCOM. It should be noted that reconciliation of general ledger accounts can not occur at a central location as depot maintenance money is no longer controlled nor dispersed from a single location.

# Department of the Navy Comments



DEPARTMENT OF THE NAVY  
OFFICE OF THE ASSISTANT SECRETARY  
(Research, Development and Acquisition)  
WASHINGTON, D.C. 20350-1000

12 MAY 1993

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE INSPECTOR GENERAL

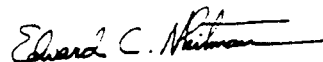
Subj: DRAFT REPORT ON "THE IMPLEMENTATION OF SPECIAL COST ACCOUNTING AND REPORTING REQUIREMENTS BY DEPOT MAINTENANCE ACTIVITIES (PROJECT 2LB-0036) - ACTION MEMORANDUM

Ref: (a) DODIG Memo of 25 February 93

Encl: (1) DON Response

I am responding to the draft audit report forwarded by reference (a) concerning special cost accounting and reporting requirements for DOD maintenance activities.

The Department of the Navy response is provided at enclosure (1). We refer comment and action on recommendations A-2 and B-3 to the OSD Comptroller and Defense Financial Accounting Service.

  
Edward C. Whitman

Copy to:  
NAVINSGEN  
NAVCOMPT (NCB-53)

Department of the Navy Response  
to  
DODIG Draft Report of 25 February 1993  
on  
Special Cost Accounting and Reporting Requirements for  
DOD Maintenance Activities  
Project No. 2LB-0036

Finding A: Weapons Systems Maintenance Cost

The Military Departments did not promptly report to OSD complete and accurate output and unit production costs for the maintenance of weapons systems at DoD organic depots and contractor-operated facilities. This occurred because OSD had inadequate guidance and internal control procedures. Additionally, the Military Departments did not implement the internal control and reporting procedures specified in the DoD Accounting Manual. As a result, OSD managers and Congress did not have reliable cost data and a uniform basis for monitoring and evaluating the efficiency and productivity of DoD maintenance depots. OSD officials also could not determine if the Military Departments are achieving the \$3.9 billion reduction in depot maintenance costs directed by the Deputy Secretary of Defense. For FY 1990, \$4.512 billion (28.5 percent) of \$15.859 billion reported by the Military Departments to OSD was not identified to major weapons systems or subsystems and the total maintenance costs over 2 years were understated by at least \$486 million.

Recommendation:

2. We recommend that the Under Secretaries of the Military Departments update guidance and implement internal control procedures that will fully comply with requirements of chapter 76 of the DoD Accounting manual 7220.9-M. The Under Secretaries should provide plans of action to the Comptroller of the Department of Defense by June 30, 1993, on the implementation of procedures that include requirements to:

- a. Record, accumulate, and report work in process.
- b. Update data codes for weapons and support systems and contractors quarterly.
- c. Maintain, in a central location, a file of the cost data reported to OSD.
- d. Maintain a yearend data file of the most recent 5 years for processing inquiries. This data file will help plot weapons system maintenance cost trends.
- e. Make available, for a minimum of 2 years, copies of quarterly data update tapes for review.
- f. Provide an audit trail from the quarterly data tapes

ENCLOSURE(1)

back to the job order cost records for cost and production reporting systems.

g. Reconcile all completed work and work in process to the amounts recorded in the general ledger accounts.

h. Perform a review by maintenance, logistics and cost accounting experts at appropriate military command levels to determine the accuracy, completeness, and reasonableness of data being submitted.

DON Position:

The Department of the Navy is not in a position to address or take corrective action on this recommendation. Accounting systems that accumulate this data fall within the responsibility of the OSD Comptroller and the Defense Financial Accounting Service (DFAS). The Navy therefore refers this recommendation to the OSD Comptroller and DFAS.

Finding B. OSD Maintenance Cost Reporting Requirements

The Military Departments' were not processing and producing reports on the cost of weapons systems maintenance in the most efficient manner. This occurred because OSD had not defined the report format or data content required for the depot maintenance production report in DoD Accounting Manual 7220.9-M. Additionally, OSD and the Military Departments had not evaluated the potential for consolidating and revising data management systems for developing and reporting on the maintenance of weapons systems. As a result, the Military Departments were incurring unnecessary administrative costs and there were delays in reporting DoD depot maintenance costs.

Recommendation:

3. We recommend that the Under Secretaries of the Military Departments centrally consolidate the preparation of computer data tapes and cost reports of depot maintenance activities, and eliminate personnel and reduce computer resources no longer required to process depot maintenance cost reports.

DON Position:

The Department of the Navy is not in a position to address or take corrective action on this recommendation. Actions to consolidate the preparation of computer data tapes and cost reports of depot maintenance activities fall within the responsibility of the OSD Comptroller and the Defense Financial Accounting Service (DFAS). The Navy therefore refers this recommendation to the OSD Comptroller and DFAS.

# Department of the Air Force Comments



OFFICE OF THE ASSISTANT SECRETARY

DEPARTMENT OF THE AIR FORCE  
WASHINGTON DC



12 MAY 1993

## MEMORANDUM FOR THE OFFICE OF THE INSPECTOR GENERAL LOGISTICS SUPPORT DIRECTORATE

SUBJECT The implementation of Special Cost Accounting and Reporting Requirements By Depot Maintenance Activities (Project 2LB-0036)

This is the Air Force response to your draft audit report dated 25 February 1993 Report on the Audit of the implementation of Special Cost Accounting and Reporting Requirements by Depot Maintenance Activities (Project No. 2LB-0036)

The principal Air Force concerns with the report are:

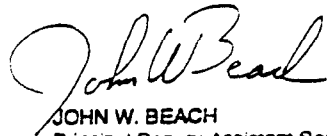
We concur with Finding A, with the exception of some statements and the validity of Appendixes B, C, D and E. We acknowledge that the Air Force must implement DoD 7220 9-M, Chapter 76, reporting requirements in particular by providing work-in-process data in the annual AP-PM-(A)1397 Report. However, the figures presented in this audit are misleading and inaccurate, especially Appendix C which was derived by use of an incorrect calculation. Appendix D uses our report which consists of both funded and unfunded costs, and compares it to our financial statements containing only funded cost data. This comparison was done without performing adjustments for either condition or timing differences.

We acknowledge that the internal AFMC systems which provide depot maintenance cost and production data are technologically outdated. However, we did not address corrective actions or completion dates since these recommendations are addressed to the Comptroller of the Department of Defense. We agree that the recommendations listed for both Findings A and B would be beneficial.

The AP-PM(A)1397 Report can only be as accurate as the data from the source systems. All these systems are being affected by DMRDs, DBCF, DMMIS, standardization of industrial and supply management systems, competition, fee for service, downsizing of DoD, and DFAS capitalization.

We suggest that the report recommend that OSD establish and budget for an official requirement for a common Service successor to the cost and production reporting systems, including the Air Force H036A/B systems. Since the Military Departments' systems are designed not for day-to-day management, but for reporting historical costs to OSD and Congress we believe that the reporting requirements for the system should be limited to the minimum necessary. A common Service successor funded by OSD would be consistent with the current emphasis on economy and efficiency, and recognize the implications of fee for service.

The Air Force's detailed response to the report's findings and recommendations is attached. Please advise if we can be of further assistance. Our point of contact is Ms Belinda Randle, SAF/FMBMR 43803.



JOHN W. BEACH  
Principal Deputy Assistant Secretary  
of the Air Force (Financial Management)

1 Atch  
Proposed AF Comments

AIR FORCE DEPOT MAINTENANCE BUSINESS AREA COMMENTS  
REGARDING DRAFT AUDIT REPORT ON THE IMPLEMENTATION OF  
SPECIAL COST ACCOUNTING AND REPORTING REQUIREMENTS BY  
DEPOT MAINTENANCE ACTIVITIES

PROJECT 2LB-0036, 25 FEBRUARY 93

FINDINGS

FINDING A

Concur with Finding A, with the exception of some statements and the validity of Appendixes B, C, D and E. Our comments and clarifications follow:

1. The Military Departments did not promptly report to OSD complete and accurate output and unit production costs (ref Pages i, 10 and 16). We acknowledge that we have not implemented DOD 7220.9-M, Chapter 76, reporting requirements.

i, 10 and 15

2. Inadequate guidance and internal control weaknesses (ref Pages ii, 4, 10, 11, 13, 14, 16 and 17). Since we are not the OPR for DOD 7220.9-M, we have no comments.

ii, 4, 10, 11, 13, 14, 15, 16, and 17

3. 28.5% of data not identified to major end items or weapon systems (ref Pages i, 10, 13, 14 and Appendix E). The technology of the current AF systems does not allow allocated identification for common use items (i.e., if an aircraft engine has multiple applications to weapon systems, it cannot be specifically assigned). However, the statement that an entry will pass with identification of only the prime weapon system without the series identification (e.g., C130) is inaccurate. In the AF systems, this entry will create an error which must be corrected before the data line is permitted to pass through. A match to the Weapon and Support Systems Code (WSSC) Table must occur (i.e., any C130 entry must contain the series identification). For common use items applicable to more than one series, coding will be to the basic weapon system. In other words, a data line with an End Item Identity (EIID) which has applicability to more than one series can be coded in the WSSC field with the code for the C130, but in the EIID

same



field must be identified to a specific National Stock Number (NSN), Federal Supply Class (FSC), etc. See our comments on Appendix E for further information.

4 Total maintenance costs were understated by at least \$486M (ref Pages I, 10, 12 and Appendix D). These statements need clarification that the \$486M is based on the fact that reports were used that were not compatible (i.e., reports that contain both funded and unfunded work were compared to reports that contain only funded data), and possibly that work-in-process is not included in the cost and production report provided by Air Force, yet is included in AF financial statements.

i, 10, 11, 12  
and Appendix I

5. Uniform recordation, accumulation, and reporting of costs (ref Pages I, 10, 13 and 17). It is the intention of OSD that the Services use this report to assist management in measuring productivity and efficiency, developing and using performance measurement and cost standards, and highlighting areas in need of increased management emphasis. The quarterly processing of this data cannot compete with decision-making based on the daily/weekly/monthly processing of the internal systems which interface the data to the reporting systems.

i, 10, 13, 16  
and 17

6. Reports not received within the required time frame (ref Pages I, 11 and Appendix B). The problems with our FY90 submission were the result of our conversion from CYBER hardware to AMDAHL hardware during FY90. However, the general audit comment and those in Appendix B regarding timeliness are misleading, as shown by the examples below. In addition, see our comments on Appendix B.

same

a. In FY89, AF submitted the report on 22 Dec 89, meeting the reporting date, but AF is shown as 185 days late. OSD verbally requested additional reporting for FY89. The actions taken by AF in the resubmission did not change the reported cost or production data in any manner. The resubmission merely flagged certain data for increased visibility to fulfill the OSD request.

b. The submission dates for other years also disagree with our records. We submit our report to DMDC, Monterey CA, per OSD and DMDC Arlington VA instructions. We have no control over when DMDC Monterey notifies DMDC Arlington that the tape has been received, nor when they process the tape. For example, the FY92 AF report was mailed 23 Dec 92

by express mail. DMDC Arlington informed us they were notified by DMDC Monterey that it was received mid-January

7. Completeness (ref Page 12) We acknowledge that we are not reporting work-in-process in compliance with DOD 7220.9-M, Chapter 76.

11

8. Comparisons of FY87 through FY90 costs (ref Page 12 and Appendix C). None of the Percent Variance figures are accurate since the calculations were derived by using the wrong denominator. In order to compare years, it is necessary to obtain the difference, then divide by the year used as the base. For example, to compute "Other" for FY87 to FY88, divide the 2.67 difference by the base of 5.6 (FY87) to obtain the 47.68% "change" (not the 91.1% as shown). All calculations in Appendix C for WR-ALC were based on the wrong denominator. Also the percent "variance" columns should more appropriately be labeled as percent "change". A variance indicates a difference that should not occur. Costs will normally vary from year to year depending upon workload and management initiatives taken. The changes shown for Air Force appear to be reasonable considering the workload changes occurring within the depots, inflation, and the initiatives taken to track costs of labor and material more efficiently.

same

9. Total costs had unusually large variances (ref Page 12 and Appendix D). HQ AFMC reconciles their financial reports to the AP-MP(A)1397 cost and production report each quarter. For FY90, WR-ALC and HQ AFMC reconciled to within 1.1% of the General Ledger accounts for Organic work. Without supporting documentation as to the development of the auditor's figures, we can only make assumptions based on our figures. It appears that the auditors combined funded and unfunded figures and compared them to our financial statements which contain only funded costs. Unfunded, in this case, means costs which are paid from another appropriation other than DMIF and supplied free to DMIF. Also, any figures derived by the auditors which included WIP will cause variances since the Air Force is not providing WIP data in the cost and production report. In addition, it appears that the auditors did not allow for timing differences between systems feeding the cost and production data. If the auditors had performed adjustments for the above conditions a more accurate picture would have been presented. We recommend that statements be included that note the content of the figures provided throughout this audit report.

same

10. Accuracy. Military Departments did not ensure data tables for weapon system coding contained sufficient detail, were updated regularly, and were used uniformly. The AF WSSC Table is reviewed and updated at least quarterly. We provide a copy of our WSSC Table with our report tape, which contains the master file of WSSCs used during the fiscal year being reported. It appears that DMDC does not update their file before processing the annual data. For example, for FY92 DMDC provided AF a list of 25 non converting WSSCs. Of these, all but one appeared in the Master WSSC tape provided with our report. See our comments on Appendix E for additional information.

11. Contractor codes for identifying contractors performing maintenance were not sufficiently developed, updated, or used, or were outdated, incomplete, inaccurate, or missing (ref Pages 13, 14, 15 and Appendix E). The figures shown by the auditors were obtained from DMDC, and are not valid. DMDC has been informed that many of the codes listed as invalid are valid. We learned that DMDC was not matching to the section that listed CAGE codes for contractors in foreign countries. In addition, many of the codes were valid at the time the work was reported as completed, but later were either deleted or replaced with another CAGE code. We also learned that DMDC had neither used a current CAGE code tape, nor interrogated the section that would give information on deleted or deleted/replaced codes. DLA issues, deletes, and replaces codes on a daily basis. The annual AF report that is derived from quarterly processing will never be 100% accurate at any given time. See our comments on Appendix E for additional information.

12. No narrative analysis, and did not verify or validate any information in final reports (ref Pages 16, 19 and 23). We began submitting a limited analysis with the FY86 submission, and detailed reconciliation to AF Financial Statements beginning with the FY87 submission. We have never received any comments whether our input is acceptable and, if not, what is wanted other than the general statement "trends and analysis"

13. Issuance of updated implementing guidance in Chapter 76 (ref Pages 16 and 17). The AFMC reporting systems are centrally controlled by the HQ AFMC OPR. We acknowledge that the guidance to comply with Chapter 76 has been withheld pending obtaining the required funding to redesign the reporting systems and the consequent changes to the Depot Maintenance Management Information System (DMMIS)

same

15, 19, and  
25

same

14. An Air Force official estimated DMMIS cost at \$1.5 M (ref Page 17). This estimate is probably very low considering the widespread effect of the changes. Our position is that it will probably require \$5M+ to accomplish the change systems providing contract data. These estimates are very subjective since no formal Communication-Computer Systems Requirements Document (CSRD) has been submitted for evaluation and pricing. We do not believe that the individual Services should independently modernize their systems. Instead, we believe a CSRD which reflects the total DOD requirement should be prepared.

16

15. Year End Data Files (ref Page 18). The statement that "None of the Military Departments had complete data files available for 5 years" is inaccurate. Air Force has tape files for at least six years, and complete microfiche files back to the early 1970s.

17

16. Labor and materials allocated to Air Force job orders could not be traced to supporting cost records (ref Page 18). We acknowledge that our systems allocated based on actual labor hours, whereas the requirement is for allocation based on total incurred costs

17. Contract Date Reconciliation (ref Page 19). We acknowledge that we do not reconcile contract data to general ledger accounts.

same

18. Effective edit process that includes reviews by cost accounting and maintenance or logistics personnel (ref Pages 19 and 20). The Air Force H036A/B systems have 75+ edits and any exceptions to the edits are reviewed and corrected by Cost Accounting.

19

#### FINDING B

Concur with Finding B. Our comments and clarifications follow

1. Not processing and producing reports on the cost of weapons systems maintenance in the most efficient manner (ref Page 22). We acknowledge that our reporting systems are technologically outdated.

24

2. Hard copy reports (ref Page 22, 23 and Finding A, Pages 11 and 15). The requirement for the hard copy report is waiting in queue for

15

development in the AF H036A/B systems. Completion of this work is dependent upon other priorities such as DMRD implementations. At the Nov 92 meeting with USAF, DMDC, and OSD personnel, we were able to determine the extent of data required for the hard copy report, but are still unsure of any exact format. On Page 24, this audit report states that a format was coordinated with the Army. Request we be advised if the auditors are referring to the current DMDC reports. If so, we would appreciate receiving the specifications for compilation. If the format is other than the reports the auditors provided us from DMDC request we be provided the same information the Army received.

26

3. Air Force Reports (ref Pages II and 25). Consolidation of the H036A/B and VAMOSOC systems is proposed/recommended. Since we are not OPR for VAMOSOC, this proposal should be coordinated with SAF

27

#### RECOMMENDATIONS

##### FINDING A

We agree with Finding A recommendations; however, we cannot address corrective actions or completion dates since these recommendations are addressed to the Comptroller of the Department of Defense.

##### FINDING B

We agree with the Finding B recommendations; however we cannot address corrective actions or completion dates since the recommendations are addressed to the Comptroller of Department of Defense

#### APPENDIX B

1 Timeliness of reports. The note at the bottom states the days shown include resubmissions, but this still allows for distortion. On Page 11, it states that the Air Force submitted the report on time only once in FY87. We have no control over when DMDC, Monterey CA notifies DMDC in Arlington that the tape has been received, nor when they process the tape. Our records indicate that the fiscal year tapes were mailed as follows.

same

FY88 - 5 Jan 87 (express Mail)

FY87 - 10 Dec 87.

FY88 - 17 Mar 88 (delay caused by implementation of AMARC reporting, separation of Kadena data from OO-ALC data, and elimination of Maintenance Support data).

FY89 - 22 Dec 89 (resubmitted 27 Jun 90 to comply with agreement between Mr. Bob Mason (OSD) and Mr. John Stallings (HQ AFMC Maintenance) that Air Force would distinguish between temporary vs permanent JON records and highlight non NSN, MDS and TMS records submitted by AMARC) The Air Force therefore met the reporting date for FY89. The resubmission merely increased visibility of certain data. The actions taken by AF in the resubmission to fulfill the OSD request did not change the cost or production data in any manner. To say that AF was 185 days late is an inaccurate statement

FY90 - 21 Dec 90 (resubmitted 27 Jun 91 to correct CAGE codes and programming error in treatment of negative entries). The report inaccurately states that the AF was 39 days late for FY90 and that the tape was incomplete and unreadable. The original submission went out 21 Dec 90 to DMDC in Monterey CA. We converted from CYBER hardware to AMDAHL hardware during FY90 and acknowledge that there were problems in the conversion. One problem was that the tape was provided in ASCII rather than EBCDIC. A conversion to make this tape "readable" would have been possible at DMDC, but they requested a resubmission. We provided this tape and later discovered an additional problem in the treatment of negative entries, which stemmed both from the change to AMDAHL and a change requested by OSD to provide negative entries, which formerly had been deleted from the file. This problem was corrected and a resubmission provided, which also included the results of our voluntary manual review of CAGE codes

FY91 - 24 Jan 92 (completed processing 8 Jan 92; tape withheld pending decision whether to manually correct invalid CAGE codes). After consideration, the decision was made to release the FY91 tape without a manual review of CAGE codes.

FY92 - 23 Dec 92 (express Mail), DMDC Arlington informed us that they were not notified by DMDC Monterey that the FY92 tape was received until mid January.

#### APPENDIX C

None of the Percent Variance figures are accurate since the calculations were derived by using the wrong denominator. In order to compare years, obtain the difference, then divide by the year used as the base (e.g., for FY87 to FY88 "Other," divide the 2.67 difference by the base of 5.6 (FY87), giving a result of a 47.68% "change" (not the 91.1% reflected in the report). As stated before, this is a "change", not a variance since costs will normally vary from year to year. All calculations for WR-ALC were based on the wrong denominator. See Finding A, paragraph 8. for additional comments.

#### APPENDIX D

A statement should be included in the Appendix that indicates the basis for the figures. It appears that the auditors did not use compatible data to perform their analyses. See Finding A, paragraph 9. for additional comments.

#### APPENDIX E

1. Unidentified Costs. The Appendix should provide information as to content of figures. It appears that the upper portion refers to records that did not contain unique WSSC codes, which would include both Organic and Contract data. If so, then some of the same costs are reflected in the lower portion that applies to contractors. Without supporting information, the data is not clear and subject to misinterpretation.

2. Costs Unidentified to Weapon Systems. The reason for unidentified costs is due to the nature of the Air Force reporting system. The technology of the current AF systems does not allow allocated identification for common use items (i.e., if an aircraft engine has multiple applications, it cannot be specifically assigned). However, the statement that an entry will pass with identification of only the prime weapon system without the series identification (e.g., C130) is inaccurate. In the AF systems, this entry will create an error which must be corrected before a match to the WSSC Table

occurs (i.e., any C130 entry must contain the series identification) Weapon system coding for common use items applicable to more than one series will be to the basic weapon system. In other words, a data line with an end item identity (EIID) which has applicability to more than one series can be coded in the WSSC field as C130, but in the EIID field it must be a specific NSN, FSC, etc. identification

3. Costs Unidentified to Contractors. The AF has implemented CAGE codes and identifies costs to specific contractors. We performed a review of the 80 codes in our FY90 report that DMDC listed as invalid. We found that at least 15 of the codes were assigned to foreign contractors and are listed in a separate section of the CAGE code tape, which DMDC failed to interrogate. We also determined that some of the other codes were valid when the data was processed but were either canceled or canceled/replaced at a later time. This information is also available in another section of the CAGE code tape. The rest were either invalid or reflected contractors that are too small to be assigned a CAGE code. We improved the internal AF H036A/B systems edit on CAGE codes prior to the fourth quarter FY90 processing, which has greatly improved our submission. Invalid CAGE codes passing the edit are minimal. This new edit would have detected at least 90% of the invalid codes provided in the FY90 report.

In the FY90 resubmission, we corrected CAGE codes in 231 records of the 49,731 record file. Forty-three records involving sixteen CAGE codes could not be corrected. It is important to remember that CAGE codes may be valid when data is processed during a year, yet be canceled or changed during the year for a variety of reasons. Since AF processes quarterly the annual report tape contains information valid at the point in time. CAGE codes are updated on a continual basis by the Defense Logistics Agency. It would not be cost efficient to pursue 100% validation at any one period of time.

We have since reviewed the list from DMDC of 52 nonconverting codes from our FY92 data and note that they again include as invalid several CAGE codes which are currently active. DMDC has informed us they did not use an updated CAGE code tape. It also appears that they still are not picking up the portion of tape containing codes assigned to foreign contractors. In addition, several of the other have been canceled and replaced by new CAGE codes. Our manual research of the FY92 listing of 52 codes determined that nineteen were valid and active, six were canceled/replaced, twenty-one were invalid and six are pending research. All of the twenty-one



invalid were due to an alpha "O" usage vs the correct zero, and usage of an "I" vs the correct 1. Edits on CAGE codes are very difficult due to the fact that any of the five positions can be alpha or numeric. The conditions above cannot be edited without a match to a valid CAGE code tape. We have a requirement in place that, when implemented, will provide the direct match needed. However, this may not be cost efficient, considering the administrative and computer time involved to correct a possible twenty-six incorrect codes involving approximately forty records out of the 44-45 thousand record annual file. Also see comments for Finding A, paragraph 11

#### SUMMARY

The H036A/B systems are designed to capture historical costs primarily for the submission of the report to OSD. Funding by the Air Force Materiel Command is not available at this time. The costs incurred by the AF to prepare this report are very high in terms of manpower, computer time, and administrative costs. Air Force does not have the resources to provide up to the minute data or immediate changes in requirements. Traditionally, when requirements are changed or added by OSD, the expectation is that these can be performed retroactively. We add requirement and make changes in line with resources available. With the emphasis on economy and efficiency, and recognizing the implications of fee for service, we believe that the requirements should be reviewed and decreased, and a common Service successor be funded by OSD.

## **Audit Team Members**

Shelton R. Young	Director, Logistics Support Directorate
Christian Hendricks	Program Director
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Evelyn Walters	Auditor
Pedro Toscano, Jr.	Auditor
David Touchette	Auditor